The study *Hunger Disease* published in 1946\(^1\) is a unique scientific work, whose separateness and exceptionality does not require further justification.\(^2\) A group of Jewish physicians in the Warsaw ghetto ventured to examine physiological changes in human organisms as a result of protracted starvation. The biological/chemical aspect of death became the object of the research.

The research on hunger disease began in February 1942. Doctor Izrael Milejkowski – Judenrat member and head of the Health and Hospitals Department – became the director of the research team consisting of over 20 physicians and lab technicians. The following assumed patronage over the enterprise: the Judenrat Chairman Adam Czerniaków and the Economic Council Chairman Abraham Gepner.\(^3\) The research was carried out in the Czyste Jewish Hospital (in Doctor

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\(^1\) *Hunger Disease. Studies by the Jewish Physicians in the Warsaw Ghetto in 1942*, ed. M. Winick (New York, 1979). All the quotations herein come from this edition. The study was also published in French in 1946.

\(^2\) Before World War II no comprehensive research on hunger disease had been carried out. The other known comprehensive study on hunger disease from that period, apart from the work of Warsaw ghetto physicians, was based on Prof. Ancel Keys’s research. Together with a group of co-workers from the University of Minnesota, he conducted research on and observation of student volunteers who participated in an experiment aimed at showing how the human body functions during protracted starvation. Obviously, the volunteers were carefully monitored and the differences in the conditions in which both studies on starvation were created do not require additional comment; cf. A. Keys, J. Brozek, A. Henschel, O. Micklelsen, H. Longstreet Taylor, *The Biology of Human Starvation*, vol. 1–2 (Minneapolis, 1950), quoted in Ch.G. Roland, *Courage under Siege. Starvation, Disease, and Death in the Warsaw Ghetto* (Oxford, 1992), 115.

\(^3\) The entries in Czerniakow’s diary show that his access was not limited to honorary patronage over the research, but that he also took a keen interest in its course and results. On 25 February 1942 he wrote, “At 12 o’clock at the Stawki Street hospital… Dr. Stein performed… an autopsy of a 30-year-old woman… who had died of starvation.” The entry of 6 July reads, “In the afternoon a conference with Dr. Milejkowski. The findings of scientific research on hunger. Papers were given by Dr. Apfelbaum, Dr. Stein, Dr. Fliederbaum, Dr. Drein”. [There is a discrepancy between the Polish and the English edition. The last name in the Polish edition is “doktor [Dr.] Kiceń,” with the editor’s note correcting the spelling as “Koceń,” whereas
Emil Apfelbaum’s ward) and in the Bersohn and Bauman Children’s Hospital (in Doctor Anna Braude-Heller’s ward). Naturally, the entire project was kept secret from the Germans. The selected patients (the aim was to exclude starving patients who simultaneously suffered from other diseases, so that only “clear-cut cases” of hunger disease without complications could be analyzed; most often the patients were brought from the refugee centers) were put in different hospital wards. Then they were thoroughly examined and their condition was continuously monitored to establish their reaction to the procedures they underwent. The deceased patients’ bodies were subject to autopsy and further examination. This part of the physicians’ work was carried out in the cemetery shed where the corpses awaited burial in mass graves. Only the autopsy completed the picture which had been emerging in the course of clinical examination. Paradoxically, even though the physicians accompanied the patients in dying and applied procedures to sustain life, death was a necessary condition for success of their research. The physicians’ key area of interest was the analysis of the mechanisms regulating the body’s energy management during hunger disease as well as the mechanisms regulating the management of water, sugar, hormones, etc. The aim of the research was to obtain the most complete clinical and biochemical picture of severe inanition (inanitio permagna). Interrupted in July by the deportation action, the work was continued after October 1942. The results were discussed during the research team’s seminars. The series of medical articles thus obtained covers basic issues characteristic of starvation changes: dermatological changes, starvation anatomy, biochemistry, heart action changes, morphology and ophthalmic changes. The research team was trying to finish and secure the study by February 1943, but the January action rendered completion of the research impossible. Ultimately, the scientific material remained unfinished and four articles already written were lost. Shortly before the uprising and the ghetto’s final liquidation, the team of physicians managed to send six edited and printed articles to the “Aryan side,” into the hands of Prof. Witold Orlowski – the Director of the Second Clinic of Internal Diseases of Warsaw University – “in order to save the collective work and to present it to the world.” The articles remained there until the end of the war, to be published by the Joint (American Jewish Joint Distribution


4 In his testimony Doctor Emil Apfelbaum mentions a group of SS-men and Gestapo functionaries who searched the hospital looking for notes of scientific character and who threatened that “the Jews had no right to scholarly work;” cf. Yad Vashem Archive, O33/1558, E 104-4-7, Apfelbaum.

5 In the face of the very high mortality rate (20–30 people a day), autopsies were conducted only on cases diagnostically unclear or interesting from the medical point of view. The autopsy statistics were based on 492 autopsies, some of which were conducted on persons who had died before the start of the research (from the beginning of January 1940) and who were posthumously incorporated into the statistics in Hunger Disease, cf. Hunger Disease.
Committee) in 1946. Most research team members did not live to see the publication of *Hunger Disease* in the form of a book.\(^6\) Five of the six main authors did not survive the war, while the book’s editor-in-chief, Doctor Emil Apfelgaum-Kowalski, exhausted by wartime experiences, died of heart disease in 1946, shortly before the book’s publication.

The research on hunger disease was carried out according to all the rigors of scientific discipline and was published in a manner typical of scholarly papers. In accordance with the accepted standards, the articles consist of a few elements, which, shedding light on one another, build up the tension: beginning with a review of the current state of research in that field, through the presentation of the author’s own research proposal, ending with a conclusion presenting his input into the current state of knowledge. It is the accentuation of the continuity of research and the legacy taken up that becomes one of the characteristic constitutive elements of the scientific narration in *Hunger Disease*.

Studies from World War I included for the first time a systematic description of the symptoms of different types of hunger, and contained clinical, biological, and anatomical findings... Much of the human material from the war years 1939 to 1942 in the Warsaw ghetto is very suitable for this research, because hunger was the most significant fact of life and death (with the exception of typhus). The previous material from World War I had been collected for the most part in prisoner-of-war camps, since these supplied a defined number of hungry people. In the Warsaw ghetto and especially in the centers for displaced persons, hunger reached proportions that were never before seen or heard of,

Doctor Józef Stein wrote.\(^7\) On the other hand, Doctor Julian Fliderbaum’s article entitled “Observations on the Starving” reads: “Because of the inappropriate conditions for conducting scientific work, the clinical aspects of hunger edema were not carefully investigated during the 1914–18 war. We will try to extend what studies there have been using the latest scientific methods.”\(^8\) The Warsaw ghetto physicians were seeking continuity and intergenerational connections. That is why their study was their last will handed over to medical science.\(^9\)

It should be pointed out here that the Warsaw ghetto research was not only a continuation of the hunger disease research conducted by past generations of physicians (the authors quote specific articles, give their predecessors’ surnames) but also a natural extension of those researchers’ pre-war scientific activity. The research in the Warsaw ghetto was undertaken by medics prepared for such a task and the core of Doctor Milejkowski’s team consisted of experienced physicians. Both Juliand Fliederbaum and Emil Apfelbaum refer to their pre-war research.

\(^6\) M. Winick, preface to *Hunger Disease*, viii.
\(^7\) J. Stein, introduction to “Pathological Anatomy of Hunger Disease,” in *Hunger Disease*, 209.
\(^8\) J. Fliderbaum, “Clinical Aspects of Hunger Disease in Adults,” in *Hunger Disease*, 13.
\(^9\) See cover blurb of *Hunger Disease*. 
The modern reader, equally unaware of medical research techniques (whether current or past ones) as the present author, faces a difficult test while reading the Warsaw ghetto physicians’ publication; one’s feelings after completing it remain ambivalent. For on the one hand, *Hunger Disease* is a monumental work. The very decision to conduct research in the ghetto conditions was obviously heroic. Moreover, the scale of the research, its perceptiveness, the researchers and lab technicians’ efforts and persistence, the extremely difficult technical conditions (the equipment and reagents’ insufficient amount and quality), as well as constant danger to the lives of the researchers (also due to their scientific activity), make it difficult to compare *Hunger Disease* with any other research project. The authors presented their scientific efforts in the form of a book, to which they affixed their names. On the other side of that enterprise there are the patients – the poorest inhabitants of the Warsaw ghetto, most often brought in from refugee centers, extremely exhausted, silent, almost indifferent to stimuli, in a pre-agonal state. Their names did not survive even in the autopsy reports – they remained “autopsy material.”

The patients were subjected to various procedures, some of which were aimed at a correct assessment of their medical condition. Most of them, however, bore attributes of medical experimentation aimed at examining the specific characteristics of hunger disease.

These are some examples of procedures conducted on the patients: injecting 14 units of insulin (measuring glucose levels in blood samples taken from finger and vein); hypodermic injection of 1 ampoule of adrenaline (blood sample taken with an empty stomach and 15 minutes after the injection to assess differences in blood sugar level); blood transfusion (120–200 cm³); gastric juice sampling (another gastric matter sampling performed two hours after alcohol or caffeine load – research on body’s acid base balance management); bone marrow sampling; blood pressure measurement; EKG; introducing tuberculin into conjunctivas; atropine eye tests; eyeball pressing; massaging the carotid branch of the vagus nerve (research on sympathetic and parasympathetic nervous systems); examination using an oscillometer (the patients in bed had to sit up and lie down); measuring blood circulation speed using Doctor Apfelbaum’s own method (intravenous injection of Congo red dye, then taking blood samples at 2–3 second intervals from a needle in the vein; 20 samples had to be taken); exercise tests (knee bends); and “swing” tests (examining the influence of body position on the pulse: a patient was placed on a special mobile operating table and the position of his body was changed – beginning with −45 degrees and ending with the upright position of +180 degrees).

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10 The patients’ last names could not survive due to the specificity and limitations of the medical discourse. In the medical text a patient was a case, not a person.

11 See J. Fliderbaum, “Metabolic Changes in Hunger Disease” and “Clinical Aspect of Hunger Disease in Adults,” in *Hunger Disease*, 20–21, 23–36.

examination of the respiratory rate three patients were each given additional 300 g of cane sugar every day for a week (over 2 kg of sugar per person per week) while three others were given 4 hard-boiled eggs each once a day for a week (within the framework of Dr. Fliderbaum’s research; blood samples were taken before the egg test and two hours after it). Two patients were given whole and high-calorie food (Doctor Michał Szejnman’s research). The medical procedures mentioned are just a selection of many others to which the patients suffering from hunger disease were subjected. Of course, not every patient underwent all of the above-mentioned tests. For an extremely exhausted person, however, being subjected to any procedures must have required extraordinary effort. It is difficult not to think about the exhaustion of the patients whose suffering due to hunger was further increased, even if the physicians’ intentions were good. Such reasoning could be accused of naivety, of ignoring the fact that the patient’s suffering (or at least his discomfort) is an integral part of most medical procedures, an obvious price to pay for health and life (also a price for the health of future generations paid by the patients subjected to medical experiments in the course of scientific research) and that each medical test necessarily objectifies the human being and makes him a passive object in the hands of professionals. One sentence from Doctor Szymon Fajgenblat’s article, however, entitles me to raise this issue: “We must emphasize the negative attitude of the patients toward ocular examinations and treatment. It made our work difficult and frustrating,” Fajgenblat wrote in the introduction to the article on ophthalmic disorders.

This statement calls for a discussion: the physician carrying out the examination complains about the lack of co-operation and understanding on the part of the patients. He openly writes about their lack of consent to participate in the experiments and research. In the Warsaw ghetto personal document literature only rarely do we hear the voice of those dying of hunger on the streets in ultimate humiliation. The information about their life and death usually comes from third parties. Those dying of starvation did not survive the war to tell about their fate, did not keep diaries to share the truth about the Holocaust with the generations to come. They died silently. Consequently, each sentence of theirs is actually torn out of non-existence, each statement deserves careful reading. In the sentence quoted above there is an openly expressed opinion: the patients do not consent to the tests, they do not want extra strain, they have no power to subject themselves to the physicians’ requirements. It should be assumed that the doctors did not ask for the patients’ consent to participate in the procedures. But the charges which we could consequently press against them would be anachronistic. In Apfelbaum’s

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14 M. Szejnman, “Changes in Peripheral Blood and Bone Marrow in Hunger Disease,” in *Hunger Disease*, 175–180.
times there were no legal regulations concerning doctor-patient relations in such medical enterprises.\textsuperscript{16} Even though the law did not regulate such issues, the medical world was aware of the dilemmas connected with conducting experiments on people. The interwar period discussions in the European medical milieu seem to anticipate the World War II physicians' dilemmas. Before the war not only obtaining experiment participants' consent, but even the physician’s right to perform experiments on people, was not obvious. The scientific world was divided into two camps representing very radical and contradictory opinions. On the one hand, German physicians promoted the thesis on the physician’s absolute right to experiment on people. On the other hand, the French and Belgian physicians advocated totally different ideas and opposed legalization of biological experiments on people. In their opinion, even the consent of the experiment’s subject could not legalize the procedure.\textsuperscript{17}

The Polish pre-war Deontological Code neither reflected the above-mentioned dilemmas of the medical world nor regulated such subtle ethical dilemmas as those posed by experiments on humans (with or without the patient’s consent).\textsuperscript{18} The Collection of Medical Deontological Principles – the first Polish code drawn up after Poland had regained independence, and officially promulgated at the General Assembly of the Medical Chamber on 16 June 1935 – stated only as follows: “Rule

\textsuperscript{16} The first international document referring to the performance of medical experiments on people was the Nuremberg Code of 1949 announced after the trial of Nazi physicians accused of performing medical experiments on concentration camp prisoners. The Nuremberg Code defined the rules of permissibility of experimentation on a living human being (the first point specifies that “The voluntary consent of the human subject is absolutely essential”) but does not give a specific definition of medical experiment. Cf. A. Wnukiewicz-Kozłowska, \textit{Eksperyment medyczny na organizmie ludzkim w prawie międzynarodowym i europejskim} (Warsaw, 2004) and \textit{Deontologia lekarska. Wybrane materiały do seminariów} (Medical University of Warsaw textbook), selected and edited by A. Tulczyński (Warsaw, 1993).

\textsuperscript{17} Claude Bernard’s book \textit{Introduction à l’étude de le Médicine Expérimentale} (Paris, 1920) was devoted to the issue of medical experiments. In 1927 doctors Garraud and Laborde-Lacoste put forward an idea that nothing, not even the participant’s consent, gives the physician the right to perform such a procedure. Cf. R. Kubiak, “Zgoda uczestnika eksperymentu,” \textit{Prawo i Medycyna} 8 (2000) and J. Sawicki, \textit{Przymus leczenia, eksperyment, udzielanie pomocy i przeszczep w świetle prawa} (Warsaw, 1966), 195–197. As late as the 1960s the authors of a Belgian medical law textbook claimed that any procedure performed by a physician not to treat the disease but for purely scientific purposes should be absolutely condemned. No matter how disinterested his intentions are, he may not subject the patient to any risk on account of carrying out his own scientific research. In J. Sawicki, \textit{Przymus leczenia}, 195.

\textsuperscript{18} In Poland the necessity to conduct a thorough discussion on that issue was postulated after the war by Ludwik Fleck in his article “W sprawie doświadczeń lekarskich na ludziach,” \textit{Polski Tygodnik Lekarski} 3 (1948): 35; reprinted in: L. Fleck, \textit{Style myślowe i fakty. Artykuły i świadectwa}, ed. S. Werner, C. Zittel, F. Schmaltz (Warsaw, 2007) (it also features Tadeusz Kielanowski’s response to Fleck’s article).
no. 1. The physician’s highest moral dictate in the performance of medical practice is the well-being of the ill as well as public health.”

Even before the promulgation of the code’s final version, i.e. during the discussions on the project, the physicians’ milieu pointed out that patients’ well-being often could not be reconciled with public health. “This rule does not apply to a series of cases in which the patient’s well-being stands in contradiction to public health,” wrote debaters K. Kosiński and J. Podniesiński, as if anticipating the problem which the Warsaw ghetto research team was to face in the future. The issue of medical experiments was not brought up by *Myśli i aforyzmy o etyce lekarskiej* [Thoughts and Aphorisms on Physicians’ Ethics], written by philosopher and physician Władysław Biegański and popular before the war.

Hence, the Warsaw ghetto physicians and scientists could not refer to any external authority which would be able to settle their probable moral dilemmas. (And ethical dilemmas usually start where knowledge, custom and law are insufficient to solve the conflict, and where the task must nevertheless be undertaken.) They were alone with their conscience, which commanded them to carry out the research on those dying of starvation in the name of progress. Hence, they put future generations’ “public health” before the well-being of their patients, whom they could not help but whom they tormented with additional tests.

We should return here to the matter fundamental to these cogitations. Can we unambiguously describe the procedures conducted on the patients as experiments? Experiments in medical sciences suppose action aimed at causing a certain phenomenon in specific conditions, in order to examine its course and to verify prior assumptions. Hence, it should be pointed out that most of the procedures which the patients of Doctor Milejowski’s team were subjected to are in conformity with the definition of experiment. They are also in accord with the definition of experiment generally accepted at that time: “In the current Polish methodological terminology, an experiment is ‘a procedure consisting in causing something in certain and not different conditions to observe whether in such conditions this something is accompanied by this or that.’”

The term *medical experiment* is invariably burdened with odium, whose source lies in the activities of German physicians in concentration camps. The notion of

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19 Quoted in: A. Tulczyński, *Polskie lekarskie kodeksy deontologiczne* (Warsaw, 1975), 146. Cf. idem, *Historia i ewolucja kodeksów deontologicznych in Etyka i deontologia lekarska* ed. T. Kielanowski (Warsaw, 1985). The Supreme Medical Chamber set up a commission directed by Jan Mazurkiewicz, which conducted work on the amendments to the Deontological Code during 1929–1931. The Code of 1935 was promulgated again in 1947 and it was binding for the physicians’ milieu until 1950, i.e. until the liquidation of medical chambers in Poland.


experiment poignantly imposes the comparison of the two research projects and two stances of the physicians. When Doctor Milejkowski’s team was doing research on hunger disease in the Warsaw ghetto, 60-year-old Johann Paul Kremer, Doctor of Philosophy and Medicine from Munich and Auschwitz camp physician, was conducting research on hunger in Auschwitz. His diary features remarks on sampling “very fresh material” from the bodies of prisoners killed with phenol injections.23 Similarly to other physicians conducting experiments on camp prisoners,24 Kremer used standard language and scientific equipment (the research technique, outcome assessment, etc.) which were in compliance with the principles of conducting scientific research, and which were common to all scientists of the Western world (the word “material” might serve as a classical example here: it was used to denote a specimen from a human corpse; it was common to both Hunger Disease and Kremer’s works). But there is a fundamental difference between Kremer’s stance and research and those of the authors of Hunger Disease – the motive of the research projects. The category of the research project’s motive, introduced into the assessment of its morality and permissibility by physician and philosopher of medicine Tadeusz Kielanowski, is a decisive issue and it definitely does not allow those activities to be equated.25 All the physicians shared common professional language and scientific procedures, but one group conducted research to perfect killing methods while the other group’s aim was to enable the development of effective methods of regeneration of exhausted human organisms.26

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Warsaw ghetto physicians faced insoluble dilemmas every day. Similarly, the physicians on Doctor Milejkowski’s team also must have been confronted with a

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23 Cf. entries of 3 October 1942 and subsequent ones from Kremer’s diary, in KL Auschwitz seen by the SS. Rudolf Höss, Pery Broad, Johann Paul Kremer (Oświęcim, 1998), 186. On 26 December 1943 Kremer wrote: “…I have brought materials from Auschwitz which absolutely must be worked on. And I had an idea this morning. I shall put my thoughts in a book, perhaps under the title, ‘Retrogression of Tissues’ or ‘Histolysis’.”

24 In Auschwitz alone the following physicians conducted medical experiments on prisoners: Eduard Wirths, Josef Mengele, Carl Clauberg, Horst Schumann and the aforementioned Johann Paul Kremer.


26 I omit the primary issue from the perspective of the patients from the Warsaw ghetto – because they were chosen for the project they were given a separate bed and over 1000 calories a day, which they would have lacked if they had stayed in the refugee centers. This fact cannot become a decisive argument, for in some, but not many, cases camp prisoners (before they were killed or brutally mutilated) also enjoyed a privileged position on account of the experiments performed on them. Finally, the interventions into the human body made by the Warsaw ghetto physicians were not in any case of the extent as those of the German physicians on camp prisoners.
great dilemma: they were physicians who could not help their patients, even though rescue seemed to be at their fingertips (they could, however, give only 1,100 calories to the dying every day – the daily amount of calories given in hospitals, which the patients would not have received if they had stayed in the refugee centers). While conducting research they had to decide who was to get 4 hard-boiled eggs or 300 grams of sugar, and they were perfectly aware what such decisions meant. Simultaneously, the use of life-saving procedures, if such were within the physicians’ powers, would upset the entire research project.

It should be stressed here that actually only Michał Szejnman’s article mentions attempts at improving the condition of the patients suffering starvation. These efforts also bear traits of experimentation.27 The other articles of the publication do not mention treatment for the disease analyzed, which in the case of any other disease would be standard procedure. For obvious reasons the development of a remedy for hunger disease was unnecessary.28 The publication, however, does not mention the impossibility of providing effective medical help to the patients. The researchers think it obvious that in the given conditions they are unable to maintain medical standards: in the ghetto hospital food is too scarce to supplement the patients’ diet and to save them; consequently, the publication does not reflect on that issue.29 Szejnman’s efforts to find an effective substitute for a high-calorie diet

27 Szejnman wrote, “Since hunger is the cause of the blood changes, we tried the following modes in therapy . . . : Raw animal blood in food. We added raw animal blood to food in a salad . . . in all cases results were negative. In spite of the salad, anemia progressed . . . . Intravenous iron . . . we tried to give patients intravenous injections of iron. The side effects were numerous . . . . Liver therapy. Two cases received liver therapy without effects. We tried to consider h. d. as an avitaminosis . . . . We tried to give our patients an extract of yeast containing B complex. In two cases the results were negative . . . . Small transfusions (120 to 200 cc) worked poorly. In one case transfusion worked poorly. In one case transfusion resulted in aggravation of symptoms and death. In a second case there was a transitory general improvement while in the third case the improvement was stable but the transfusion was not the only therapeutic measure employed . . . . Food. The best results were achieved by supplying adequate nutrition and food with an appropriate caloric value. These results could be anticipated because the only rational therapy for hunger is food [emphasis – M.J.].” See M. Szejnman, “Changes in Peripheral Blood and Bone Marrow in Hunger Disease,” in Hunger Disease, 182–185.

28 Commenting on the scientific research carried out in the Warsaw ghetto, Emanuel Ringelblum wrote, “One of the most interesting topics [of scientific research] is hunger, the most widespread disease of the ghetto, and there is only one remedy for it: the Germans need to leave Poland. In Łódź a Jewish professor from Prague made a discovery that potatoes are the best measure for hunger edema, but the problem is that it is difficult to get them,” cf. E. Ringelblum, Notes from the Warsaw Ghetto, (New York, 2010), entry of 10 June 1942. The last sentence, provided that it is not only an ironic joke, might confirm that the research on hunger disease in the Warsaw ghetto was not the only research of that type carried out in occupied Poland.

29 “It should be added that as far as quality is concerned the hospital diet did not differ much from the diet our patients lived on before their arrival at the hospital. It contained more
were limited to a few (about a dozen?) patients and marked by the coarseness of everyday life in the ghetto: the physician had equine blood and liver at his disposal, while he lacked proper synthetic B2 vitamin preparations. The conclusion on the effectiveness of a high-calorie diet (administered to two patients) ultimately bears traits of the grotesque or even produces an unintentional comical effect: there is too wide a gap between the projected scale of the research on “treatment issues” and the experiment’s outcome convergent with a piece of common-sense advice, and between thousands of people dying in the ghetto streets and the two satiated patients whom Doctor Szejnman was able to help.\textsuperscript{30} In the remaining cases the physicians’ helplessness made them remain silent on the topic of an effective remedy for their patients’ ailment.\textsuperscript{31}

The physician’s social role is outlined by the expectations concerning his person: he needs to diagnose well and treat [patients] effectively. Only he is granted the privilege of mastering disease and, consequently, of indirectly mastering death. By fulfilling the expectations, the physician confirms his role and his special position in society. His prestige as well as his authority which stems from the prestige are founded on responsibility. The physician must assume responsibility, which becomes a crucial element of his role. It is the responsibility toward all helpless laymen, who are unable to properly assess the treatment, the accuracy of diagnosis, etc. Hence, the physician’s responsibility for the patient’s health and life is total – he is responsible before his own conscience – and it makes the technical aspect of this profession inseparable from its moral aspect.\textsuperscript{32} Hence, ultimately the physician remains in a special kind of entanglement – nobody can relieve him of the responsibility for each of his patients. Not only his social role is based on the responsibility for the people entrusted to his skills, but also something much greater – his identity. In the ghetto the physician ceases to be a “healer” and becomes an “assistant of vegetables, and its calorific value reached 1100 calories, so it was also a low-calorie diet, almost fat-free and low-protein, devoid of animal protein,” Julian Fliederbaum wrote (134). But it is probable that for many patients these 1,100 hospital calories were more than they got in the refugee centers.

\textsuperscript{30} In all fairness to Doctor Szejnman, it should be stressed that he was actually checking if anemia which the patients were diagnosed with was caused by lack of a certain vitamin or nutritional component or if it was caused by general dietary deficiencies. The results of the research unambiguously pointed to the second possibility, and as the author himself writes, “These results could be anticipated.”

\textsuperscript{31} In the introduction to Hunger Disease, Doctor Milejkowski writes that the physicians felt kinship with their patients, “many of our physician colleagues themselves suffered from hunger.” (4) But that kinship was illusory: the difference between the patients and physicians lay in a few hundred calories which made the first group die slowly and in great suffering and which allowed the other group to carry out the research. But obviously, both the patients and physicians were sentenced to death. It should be said again that almost all the authors of the publication were killed in the Warsaw ghetto or in the gas chambers of Treblinka.

\textsuperscript{32} Cf. B. Tabiasa-Adamczyk, Wybrane elementy socjologii zawodów medycznych (Cracow, 1996).
death.” He faces the task most difficult among all tasks of physicians. “One of the most difficult aspects of medical art is to care for those who actually no longer need any medical care,” wrote a well-known authority on oncology. In confrontation with each dying person the physician loses all his trump cards – a deceased patient is a proof of his [professional] bankruptcy and helplessness even in “conditions at times of peace.” In the situation the ghetto physicians found themselves in this helplessness was two-fold: firstly, the patients are doomed and they will die regardless of the physicians’ skills and the state of medical knowledge; secondly, the patients must die because the physicians have practically no technical possibilities of treatment, the ghetto lacks literally everything: drugs, vaccines, dressings, food. In such a situation the physicians’ activity became virtually absurd. Instead of treating the patients, they could only slightly, and in a very limited way, postpone their death. To deal with the special metaphysical guilt they felt, the Warsaw ghetto physicians tried to turn helplessness into action – they made an effort to describe what they were looking at, as precisely as possible, from the medical perspective. The result of their efforts – the text of Hunger Disease – entered the scientific circulation; hence Doctor Izrael Milejkowski’s team’s hopes came true.

The above remarks were not presented to diminish the Warsaw ghetto physicians’ heroism or to suggest easy answers and to pass a sentence, but to raise awareness of the dilemma accompanying the thought that behind the effect of the physicians’ work there is the silent suffering of persons completely deprived of a voice and pushed to the very bottom of the ghetto hell. Not only the physicians’ fear and devotion but, first and foremost, the additional suffering and distress of the dying Warsaw ghetto inhabitants was the price that had to be paid for the creation of Hunger Disease.

Translated by Anna Brzostowska

Abstract
A research team of physicians and lab technicians under Izrael Milejkowski’s direction carried out a series of clinical and biochemical experiments on patients dying

33 J. Brehant, Thanatos le Malade et Le Médecin Devant La Mort (Paris–Amherst, 1976), 25.
34 This is clearly confirmed by the fact that the study was published in English by the Columbia University Institute of Human Nutrition (Hunger Disease. Studies by the Jewish Physicians in the Warsaw Ghetto, ed. M. Winick [New York, 1979]). The book was published as the 7th volume of the “Current Concepts in Nutrition” series. In the introduction and in the comments the publishers stress the pioneering quality of the ghetto physicians’ discoveries and their input into the development of medicine. On 24 May 1978 in the College of Physicians and Surgeons in New York a symposium was organized in honor of the authors of Hunger Disease, during which the world of medicine became acquainted with the most important discoveries made by Doctor Milejkowski’s team.
of starvation in the Warsaw ghetto so as to obtain the fullest possible picture of hunger disease. The research was carried out according to all the rigors of strict scientific discipline, and it was published after the war under the title: *Hunger Disease: Hunger Research Carried out in the Warsaw Ghetto in 1942*. According to their own words, they “supplemented the gap in accordance with the progress of knowledge.” The article is devoted to reflections on the ethical dilemmas of the research team, who in their work performed numerous medical treatments of experimental nature on extremely exhausted patients. The patients, according to Dr Fajgenblat’s words, “demonstrated negativism toward the research and treatment, which extremely hindered the work, and sometimes even frustrated it.” The article attempts to look at the monumental research work of the Warsaw ghetto doctors as a special kind of response of the medical profession to the feeling of helplessness of the dying patients. The article analyzes the situation of the Warsaw ghetto doctors, who undertook the research without the support of any external authority which could settle their possible ethical dilemmas (Polish deontological codes, European discussions on the conditions of the admissibility of medical research on patients, etc.).

**Key words**
The Holocaust, the Warsaw Ghetto, starvation, doctors in the ghetto, scientific research in the Warsaw Ghetto, ethical problems