A HISTORY OF CONCERN:
THE ETHICAL DILEMMA OF USING
NAZI MEDICAL RESEARCH DATA IN
CONTEMPORARY MEDICAL AND
SCIENTIFIC RESEARCH

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A history of concern:
The ethical dilemma of using Nazi medical research data in contemporary medical and scientific research

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This thesis is dedicated to my grandchildren and to the children of Bullenhuser Damm. My research constantly reminds me of the preciousness of human life.
A Chronicle has it that the celebrated Rabbi Schneur Zalman of Lyady was locked up in a St Petersburgh prison after being denounced by a foe of the Hasidic movement as an agitator against The Czar.

One day the warden came to see him in his solitary cell, and this is what he said:

“I am told you are a rabbi, a Master. So explain to me a message I fail to understand in the Bible. It says in the Book of Genesis that, after having bitten into the forbidden fruit, Adam fled, so that the Lord had to ask him: ‘Ayekha, where are you?’ Is it possible, even conceivable, that the creator of the world did not know where Adam was hiding?”

Whereupon the rabbi smiled and answered: “The Lord, blessed-be-His-name, knew; it was Adam who didn’t know.”

And Rabbi Schneur Zalman went on: “Do you believe the Bible to be a sacred book?”

“Yes”

“And that it speaks to all mankind, of all times, therefore also to ours.”

“Yes I believe that.”

“In that case I shall explain to you the real meaning of the question God asked of Adam. Ayekha signifies: Where do you stand in this world? What is your place in history?... These are fundamental questions that every human being must confront sooner or later.”

ELIE WIESEL 2000
## Contents

Acknowledgments iii  
List of Photographs iv  
Introduction 1  
Chapter 1 Methodology 9  
Chapter 2 The Long Road to Auschwitz 16  
Chapter 3 The Nazi Doctor and Racial Medicine 35  
Chapter 4 Human Experimentation 53  
Chapter 5 Nazi Medicine: To Use or Not to Use  

A Literature Critique 81  
Chapter 6 Nazi Medicine: To Use or Not to Use  

A Contemporary Response 113  
Chapter 7 Conclusion 138  
References 150  
Appendix 1 Ethics and Privacy Application 159  
Appendix II Invitation to Participate in the Study 188  
Appendix III Case Studies 189  
Appendix IV Questionnaire 194  
Appendix V Participant Information Statement 196  
Appendix VI Participant Consent Form 198  
Appendix VII Regulations on New Therapy and Human Experimentation Reich Circular 1931 199  
Appendix VIII Nuremberg Medical Code 202  
Appendix IX Declaration of Helsinki 204  
Appendix X T4 Medical Questionnaire 208  
Appendix XI Correspondence: Grawitz to Himmler 209  
Appendix XII Correspondence: Grawitz to Himmler 213  
Appendix XIII Journal paper by John Hayward with references  
to Alexander’s report on hypothermia experiments 218
Acknowledgements

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List of photographs

1. The medicalization of anti-Semitism is reflected in this March 1941 German-made poster for occupied Poland: “Jews are lice. They cause typhus” Deadly Medicine: Creating the Master Race United States Holocaust Memorial Museum Washington, D.C 2004 (Archiwun Panstwowe w Lublinie)

2. Dr Alfred Ploetz, co-founder of the German eugenics movement. Deadly Medicine: Creating the Master Race United States Holocaust Memorial Museum Washington, D.C. 2004 (USHMM Collection)


5. Leaflet from the Nazi journal New People circa. 1937, reads “60,000 reichsmarks is what this hereditarily ill person will cost the national community over the course of his life. Citizen, this is also your money!” Deadly Medicine: Creating the Master Race United States Holocaust Memorial Museum Washington, D.C. 2004 (Deutsches Historisches Museum, Berlin)

6. Qualitative Decline in the Population through Lower Reproductive Rates among individuals of Higher Value: In the beginning, after 30 years, after 60 years, after 90 years, after 120 years. It could come to this if individuals of lesser value have four children and those of higher value have two. Nazi propaganda poster, circa. 1938, used to promote public support for the mass sterilization program Deadly Medicine: Creating the Master Race United States Holocaust Memorial Museum Washington, D.C. 2004 (Staatsarchiv Bamberg)
7. Gypsy children who were subjects of Mengele’s research at Auschwitz between 1943 and 1945. The original photograph was found in Mengele’s files after the war. *Deadly Medicine: Creating the Master Race* United States Holocaust Memorial Museum Washington, D.C. 2004 (*Panstwowe Muzeum Auschwitz-Birkenau w Oswiecimiu*)


9. A prisoner who has been subjected to low pressure experimentation. United States Memorial Museum Washington Photograph #78615

10. The twenty children of Bullenhuser Damm showing the incisions regarding the removal of the lymphatic nodes. The Children of Bullenhuser Damm Hamburg Portrait Museum fur Hamburgische Geschichte


Introduction

1. The medicalization of anti-Semitism is reflected in this March 1941 German-made poster for occupied Poland: “Jews are lice. They cause typhus”
Introduction

Who or what is to blame for the creation of the assassins in white coats?
In their eyes, the victims did not belong to humankind; they were abstractions. The Nazi doctors were able to manipulate their bodies, play with their brains, mutilate their future without remorse; they tortured them in a thousand ways before putting an end to their lives. ¹

This thesis aims to explore a series of questions regarding whether, and if so under what circumstances, data from the Nazi medical experiments should be used in contemporary medical research. The ethical controversy surrounding the use of this data is largely due to the complex relationships between science and moral responsibility which are emotionally laden and consequently frequently misunderstood. While debate about the issue commenced soon after the Nazi Medical trials in 1946/47, it intensified during the 1960s and has continued into the twenty first century where its fundamental question of ethics as applied to medical research is still relevant today. Having seen how it was possible for ethical principles to be over-ridden, rendered dysfunctional, and even subverted to serve the interests of genocide during the Nazi period,² contemporary issues of medical ethics cannot be considered

'outside the shadow of the Holocaust...this is forcing people to confront the evil wrought by medicine'. 3

There are a number of definitive opinions regarding whether or not to use this data. According to Freedman, the current scientific and medical use of these data is not an extension of the Nazi project.4 Rather the use causally depends on that project; the project has perished, the remaining detritus has been coopted for another purpose, one that is in fact quite antithetical to the intentions of the Nazis. Berger argues that in being procedurally devoid of ethics from the very beginning, the scientific integrity of the experiments was sufficiently compromised to render the results unusable.5 Eva Mozes Kor, a twin survivor, believes the data of the dead should be shredded and placed in a transparent monument, as evidence that they exist, but cannot be used.6 Others hold that the experiments were of such a heinous and cruel nature that to use the data would align the researcher with the perpetrator.7 These are powerful and convincing arguments which raise counterarguments based on anything from emotion, philosophy, religion, science and profit to society’s expectations or government policy. Significantly though, all of these arguments are influenced by moral perceptions of what is right or wrong. However, since all argument regarding the use of the data rests on the basic assumption that the experiments have scientific validity

and relevant application, this must be established before there can be any discussion on the use, non use or citation of the data. Only once that has been verified can the question of whether and how this data should be cited be examined.

Straightforward as this may seem, there is a central complication to all research regarding the Holocaust in that it is, as the eminent Holocaust historian Marrus notes, ‘an emotionally charged topic’, particularly for the survivors, their families, and the Jews as a people. While some would argue that with the passage of time the Jewish people should, while never forgetting, move on and put the trauma behind them, such questions of forgiveness and letting go are too complex an issue in its own right to be addressed here.

Nevertheless, it is important for the victims, some of whom are still alive, to have a voice in this debate. As Elie Wiesel in his acceptance speech of the Nobel Peace Prize in 1986 said of those who died in the Holocaust, ‘No one may speak for the dead, no one may interpret their mutilated dreams and visions’; and yet ‘if we forget, we are guilty, we are accomplices.’

Rabbi Emil Fackenheim warns against using this data ‘We must grant Hitler no posthumous victories’, i.e., the victory of hiding from ourselves what we are capable

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of doing, what we may already be doing.\(^{10}\) This has arguably already occurred with the use and citation of some of the data. Instead, could exposure of their horrendous acts emphasizing how medical ethics could so easily be abandoned not become a platform for educating both the medical profession and society in general of what humankind is capable?

This dissertation provides a historical and scholarly background to the debate surrounding the use of Nazi medical data before presenting the results of the oral history undertaken for its practical research component. Chapter One will address the history of medicine in Germany from the period of the mid nineteenth century to 1933. Immediately following the Second World War and the Nuremberg Doctors’ Trials, the extreme actions of Nazi doctors were considered to have been singular to their situation, carried out under duress and in a time of madness in which they were seen to have been perversely and skilfully manipulated by the Nazi authorities to implement their program of racial cleansing. Instead, by exploring the role and influence of the scientific, academic and medical communities prior to the rise of Hitler, it will be demonstrated that the actions of the Nazi doctors were not incidental but, in fact, the logical and unavoidable consequence of modern scientific and cultural thinking, and that the behaviour of the doctors performing the experiments in Auschwitz, Dachau and other camps can be interpreted asymptomatic of the power, arrogance and, some would argue, madness of the medical and scientific community.

An attempt will be made to trace the path of medicine and medical science from the publication of Darwin’s *The Origin of Species* to review the impact it had not only on

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the debate regarding whether organisms arose through supernatural or natural means but, more importantly, on ethics and morality.\textsuperscript{11} It will be argued that Nazi doctors, both as active participants in Hitler’s murderous programs and as passive medical bystanders, were driven by an ideology and a code of ethics which were heavily influenced by Darwin and his contemporaries such as Haeckel, Günther, Schäffle and Carneri. Reference is made to Gasman’s \textit{The Scientific Origins of National Socialism}\textsuperscript{12} which examines and argues the case for Haeckel’s role as an ideological progenitor of fascist ideology as formulated in the latter’s publication of his \textit{Weltanschauung} (world view).

Chapter 2 provides insight into the collusion between the Nazis and the medical profession in implementing the legislation as applied to the sterilization and castration program, and the clandestine actions of the doctors in relation to carrying out the euthanasia program. It is shown how, without the support and cooperation of the medical profession these programs, through which approximately 400,000 people were sterilised and more than 140,000 euthanised, could not have been implemented.

Chapter 3 addresses the ‘scientific’ experiments themselves in order to demonstrate the magnitude of horror and cruelty they entailed. In the prosecution’s opening address at the Nuremberg Medical Trials in 1946, Telford Taylor emphasized that merely punishing the perpetrators was not sufficient but that the Trials needed to present clear and public proof to ensure that no one could ever doubt that these


incredible events had occurred, were fact. This study will focus on three categories of experiments: those carried out in the name of military security, those carried out in the name of racial purity, and finally, experiments that were visited upon hapless human beings to no practical scientific purpose but out of curiosity and at the whim of a physician or researcher. The selected correspondences between members of the Nazi medical community and their superiors in relation to medical experiments used in this chapter were found at Yad Vashem, Israel.

Chapter 4 is a review and analysis of past and current literature debating the scientific validity and the ethical dimensions of the actual experiments and whether or not the data should be used. Since the period of the Holocaust and particularly the Nuremberg Medical Trials, historians, physicians, ethicists and survivors have written extensively on the scientific validity and heinous nature of the medical experiments carried out by the Nazi doctors. The review will include work by scholars such as Proctor, Müller-Hill, Caplan, Berger, Freedman, Katz, Seidelman, Annas, Kater and Lifton, as well as scientists, such as Pozos and Alexander, who actually used the data or advocated its use. Finally, the review will examine the views of survivors such as Eva Mozes Kor and Sara Seilor Vigorito who oppose use of the data.

Chapter 5 gives a critical analysis of the results of an oral history project conducted with a number of physicians, psychiatrists, ethicists and psychologists from Australia, Israel, the United Kingdom, South Africa, the USA, Canada and Germany. The participants were presented with a series of questions related to three Nazi experiments and one of which was carried out in the USA, as well as being

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confronted with questions in relation to the place of ethics in modern day medical research. The purpose behind this oral history was not to quantify the responses into what percentage approved/disapproved of the use the data, but to assess where ethics lie with these professionals: Could they discard this data, when, according to some, it was proven to have scientific validity, and yet claim to adhere to the Hippocratic Oath? What is more sacred: the life of an individual now or the memory of the victims of such callous and inhumane crimes in the past? Would the scientist/physician’s decision to use the data to save a life align him with the Nazi doctor?

The questionnaire also sought to determine whether the answers given by these modern-day practitioners would be as divisive as the arguments presented in the literature. To this purpose, the final chapter will consider both the literature and the qualitative research in exploring the question of medical ethics today and their link to the Nuremberg Medical Trials.
Chapter 1: Methodology
Chapter 1: Methodology

What is the most precious thing in the world? Not to participate in injustices. They are stronger than you. They have existed in the past and they will exist in the future. But let them not come about through you.\textsuperscript{14}

\textit{Aleksandr Solzhenitsyn}

This thesis examines the so-called Nazi ‘medical’ experiments and whether the recorded data should be used through a critical analysis of the relevant literature produced by physicians, historians, scientists, ethicists and survivors. To gauge more contemporary views and to explore the link between the ethical questions surrounding the Nazi experiments and those facing modern medical research – in an environment of increasing opportunity for utopian social engineering in which human experimentation is likely to become ever more common – an oral history program was designed. Physicians, scientists and ethicists from all over the world were approached to elicit their opinions and arguments on using the Nazi data in current-day research.

Prior to proceeding with the research, approval from the Sydney University Human Research Ethics Committee was needed to conduct interviews with members of the medical and scientific community. In May 2007 an application was submitted (see Appendix I) addressing the nature of the research, the proposed selection and recruitment of participants, the collection and dissemination of results and other matters. While the process of obtaining permission was drawn out and at times frustrating, the Committee taking approximately three months to approve it, the exercise was essential and – in light of the focus of this thesis where the very absence of an ‘arm’s length’ independent body led to the abuse of morality and ethics – poignant.

Thus, while the survey did not involve interviews with survivors or children of survivors, an extremely vulnerable group, provisions for the protection of the individuals taking part in the project needed to be met, for example with regard to whether participation in the research could adversely affect the respondents. Given that it might, the further question ‘Could the research induce any psychological distress in the participants?’ was relevant. The participants were advised of the option to discontinue the project at any time for any reason without prejudice or penalty, and were directed to the Senior Ethics Officer of the University should they have any concerns or complaints.
Respondents

A total of seventy members of the medical and scientific community were approached to participate in this project. The intention was to avoid any bias towards Jews or non-Jews, or towards a particular gender or profession, and to have good representation from all groups.

Potential participants were sought and approached as follows:

1. At international medical conferences a number of the presenters were identified and approached in person or via email.
2. Email contact was established with members of the Medicine and Philosophy faculties at the Universities of Sydney, Melbourne and Oxford.
3. Personnel at medical research centres in Australia were approached.
4. Approaches were made to medical scientists at pharmaceutical companies in the UK and the USA.

While many declined to participate, giving a range of reasons from time and work restrictions to unwillingness to deal with such heinous issues, and, in one case, the methodology of the research project itself, a diverse thirty-two professionals from Australia, Israel, the United States, the United Kingdom, Germany, Canada and South Africa agreed to take part: ten Jews and twenty two non-Jews, eight women and twenty four men, three ethicists, five psychiatrists/psychologists and twenty four medical physicians with specialties including cardiology, urology, men’s and women’s health. Almost all the participants hold or have held academic positions at a
university or university hospitals, and, with the exception of two ethicists, all have had research experience in medical science.

**Methodological Justification of Questionnaires**

Despite the original plan of conducting interviews to obtain in-depth oral responses from a diverse and international range of eminent medical professionals, issues pertaining to the logistics, time and the expense of doing so suggested the employment of a written questionnaire instead.

Apart from the problem of co-ordinating phone interviews across different time zones, one of the major difficulties of getting the respondents to commit to participation was the limited time they had available. All participants considered both the subject matter and the questions complex and challenging and requiring a considered response. Thus to conduct the interviews by phone with international participants was not practical and would incur considerable expense.

The weakness of conducting this research by written interview was losing the opportunity to prompt for more in-depth responses where hesitation or vocal inflection might have indicated a reserve or even uncertainty. That said, in the majority of cases the responses were articulate, reflective and quite comprehensive, and indicated that considerable thought had been put into answering the questions. While follow-up questionnaires based on the initial responses could have been provided, the respondents’ time-constraints were prohibitive.
The questionnaires were sent out via email from the first week of August 2007 accompanied by a letter (see Appendix II) explaining the purpose of the research and welcoming their participation in the project. Attached to the email were four case studies with eight questions of which seven required qualitative information and one a Yes/No response (see Appendices III and IV). As per the requirements of the University’s Ethics Committee they also received a Participants’ Information Statement and a Participant Consent Form (see Appendices V and VI). A number of those who agreed to participate, did so on the condition of confidentiality which has been strictly adhered to, each participant being solely identified by letters of the alphabet.

A time frame for completion of the task was suggested and followed up with an email reminder as the date for submission drew near. The participants were sent a thank you email on receipt of their responses.

**Evaluation of Research Results**

A computer data base was created into which the responses were sorted according to the question. The participants’ thoughts and arguments were then examined for significant patterns and recurring themes to compare these to previous findings from the literature.
Conclusion

The literature analysis and the questionnaires form a comprehensive methodological process that captures the main arguments related to the ethical dilemma of using the Nazi data. The literary work, dating from the Nuremberg Medical Trials, provides a historical background of clear arguments for and against the use of the data, while the oral study gives insight into present-day views of members of the medical and scientific communities regarding a complex and challenging issue of medical ethics.
Chapter 2: The Long Road to Auschwitz

2. Dr Alfred Ploetz, co-founder of the German eugenics movement.

3. Dr Fritz Lenz, geneticist and one of Germany’s leading proponents of racial hygiene. Berlin.

4. Dr Ernst Haeckel, zoologist. One of Germany’s major ideologists for racism, nationalism, and imperialism.
Chapter 2: The Long Road to Auschwitz

‘Warum?’ I asked him in my poor German.

‘Hier gibt es kein warum’ (there is no why here),

he replied, pushing me inside with a shove.  

Primo Levi

The idea of creating a healthy German nation was not invented by the Nazis. When Charles Darwin introduced his theory of evolution scientists and social commentators of the day believed they had found the solution to what they considered the problem of genetic deterioration of the Volk and the social problems caused by it. The Nazi movement, however, embraced and promoted this ideology with its underlying concept of race which entailed the division of the German people into categories of ‘German’ and ‘non-German’ or ‘worthy’ and ‘unworthy’, and the discipline of ‘eugenics’ which inspired the idea of strengthening the population through genetic manipulations.  

The Nazi leaders created the political framework that would translate the ideology of inequality into a practical policy of exclusion while the bureaucratic, professional, and

15 P. Levi, If This is a Man. The Truce, London, Random House, 1996, p. 35.
16 A. Pasternak, Inhuman Research: Medical Experiments in German Concentration Camps, Budapest, Akadémiai Kiadó, 2006, p.14
scientific elite in Germany provided the legitimacy the regime needed for its smooth implementation.\textsuperscript{17} Friedlander argues that since the policy required precise definitions of groups and individuals which only racial science could provide, support from the scientific community was an important prerequisite for its successful implementation. The provision of a medically and scientifically credible model gave legitimacy to the removal of ‘racial’ disease and the ‘parasitic racial elements’. Thus the physician could justify his own actions, be they his direct involvement in the euthanasia and sterilisation programs, in the extermination process, or just through membership and support of the Nazi regime, on the grounds that Jews, Gypsies, homosexuals, the congenitally handicapped, and Slavs posed a biological genetic threat to the existence and future of the Third Reich.\textsuperscript{18}

However, to understand how Nazi doctors arrived at this point it is necessary to examine the path taken towards it. Their willingness to carry out Nazi social and political policy did not suddenly happen with Hitler’s ascendancy to power in 1933. The German medical profession had already eagerly embraced Darwinism and racial hygiene and had become world leaders in this field. Thus the concept of racial hygiene was not the original idea of Hitler. It can be argued that Hitler did not have the intellectual capacity to conceive such a complex theory and the fact that racial hygiene was so widely known was testimony to how popular it had become amongst the German population.


In his early writings, particularly *Mein Kampf* written in 1925, Hitler prophesized that racial purity would be the foundation upon which he would build the Thousand Year Reich, stating that ‘All great cultures of the past perished only because the original creative race died out from blood poisoning’.¹⁹ Once in power Hitler commended the medical profession: ‘You, you National Socialist doctors, I cannot do without you for a single day, not a single hour. If not for you then all is lost. For what good are our struggles if the health of our nation is in danger?’²⁰ The relationship became a marriage of convenience between Hitler with his fanatical obsession with racial purity and the medical profession. The doctors provided Hitler with the means to implement his policies, while they were in turn awarded professional and social status, and provided the vehicle by which the medical and scientific research that would eventually become wicked and murderous was undertaken. Thus, according to Proctor it ‘was ultimately a political movement – the seizure of state power by the Nazi Party – that allowed forces hostile to life and liberty to be unleashed within the scientific community.’²¹

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Social Darwinism

Germany in the pre-World War II period was a centre of scientific excellence. In the late nineteenth century policies and programs had been put into place that fostered medical science, of which the resulting scientific achievement and intellectual probity was the envy of the world.\textsuperscript{22} By the early 1930s, more than half of all the Nobel prizes in science had gone to German-speaking scientists while many of the most advanced medical tools and concepts had been developed in Germany.\textsuperscript{23} German medical science was leading the way in cancer research, toxicology and surgery, with the laboratories and university science departments in Berlin, Heidelberg, Marburg, and Frankfurt being considered the meccas of post-graduate study and attracting physicians and surgeons throughout the world. Science held an illustrious place in German society and National Socialism took root in a culture supporting the greatest scientific tradition of the century.\textsuperscript{24} The stature of German medicine was such that the Flexnor Report, which was to reform North American medical education at the turn of the nineteenth century, was based largely on observations of the German medical model.\textsuperscript{25} Despite significant achievements in diverse areas, it was in eugenics and euthanasia that German science took centre stage, an area that was to be forever linked to the Final Solution of the Nazi regime.

\textsuperscript{23} R.N. Proctor, \textit{Racial Hygiene: Medicine under the Nazis}, op. cit., p. 293.
\textsuperscript{24} ibid.
Following the publication of *The Origin of Species* an international eugenics movement emerged with German scientists Alfred Ploetz and Wilhelm Schallmayer as the early leaders of the Socialist Darwinist movement. Ploetz published *The Efficiency of our Race and the Protection of the Weak* in 1895 establishing the concept of *racial hygiene* (*Rassenhygiene*) based on the theory that there were two races: superior (*höherwertig*) and inferior (*minderwertig*). Seeing the effects, particularly after World War I, of a declining birth-rate, high mortality and an ever larger number of people dependent on social welfare or some type of government subsidy, Ploetz argued that a variety of measures were needed to halt and reverse this trend. He maintained the conception of a child should ‘not to be left to accident or to an over-excited moment, but rather regulated according to the principles which science has determined for the circumstances and times.’

He suggested furthermore that in the event that such a system broke down and a deformed baby was born, ‘a college of physicians, which decides concerning issues of citizenship, should prepare a gentle death, shall we say through a small dose of morphia.’

A supporter of Ploetz was Ernst Haeckel, a prominent and influential German biologist, who insisted that if selection determined the life of bacteria and bees, it must also affect human beings and that ‘artificial’ selection should be used to aid the natural process, arguing that if natural selection did not kill degenerates, human beings should step in. To strengthen his argument Haeckel referred to the ancient Spartans:

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27 ibid.

A remarkable instance of artificial selection of man, on a great scale, is furnished by the ancient Spartans, among who, in obedience to a special law, all newly-born children were subject to careful examination and selection. All those that were weak, sickly or affected with any bodily infirmity were killed. Only the perfectly healthy and strong children were allowed to live, and they alone afterwards propagated the race. By this means the Spartan race was not only continually preserved in excellent strength and vigor, but the perfection of their bodies increased with every generation.29

Haeckel recommended the killing of the mentally and physically defective in the interests of strengthening the culturally and physically superior ‘central type of people’ whose most valuable part was the ‘Indo-Germanic race’.30 Haeckel expounded his ideas in his book “The Riddle of Life” published in 1904 when he stated:

What profit does humanity derive from the thousands of cripples who are born each year, from deaf and dumb, from cretins, from those with incurable hereditary defects etc. who are kept alive artificially and then raised to adulthood…What an immense aggregate of suffering and pain these depressing figures represent for the unfortunate sick people themselves, what a fathomless sum of worry and grief for their families, what a loss in terms of private resources and costs to the state for the

29 D. Dwork and R.J. Van Pelt, The Third Reich, op. cit., p.163.
healthy! How much of this loss and suffering could be obviated, if one finally decided to liberate the totally incurable from their indescribable suffering with a dose of morphia.\(^{31}\)

Haeckel was not merely a harmless eccentric ideologist-cum-scientist. Other racial hygienists concurred with Haeckel in foreseeing a general ‘degeneration’ of the German race against which they set about to establish a new kind of ‘hygiene’.

The philosopher Friedrich Nietzsche too had had a significant influence on late nineteenth and early twentieth century thinking by challenging the very foundations of traditional morality. In his book *Twilight of the Idols* he offered a ‘Morality for Physicians’ in which he called sick people parasites who had no right to life. He encouraged doctors to cultivate a ‘new responsibility’ by fostering ‘the ascending life’ while demanding ‘the most ruthless suppression and pushing aside of the degenerating life’.\(^{32}\) Another Darwinist whose views had a wide audience and influence was Ludwig Büchner, who believed that races were locked into a Darwinian struggle which would see the complete annihilation of the ‘inferior’ races.\(^ {33}\) In a lecture to the Society of German Scientists and Physicians in 1909, Felix von Luschan summed up the prevailing atmosphere of the time when he declared that ‘every means is good, if it raises the fruitfulness of the fit and limits that of the unfit’.\(^ {34}\)

In 1920, a provocative book *Permitting the Destruction of Life Unworthy of Life* by Alfred Hoche, a professor of psychiatry, and Karl Binding, a legal scholar, was

\(^{31}\)ibid.
\(^{34}\)ibid., p. 54.
published. The book reflected the Darwinian devaluing of life in particular the purposelessness of individual life. Hoche in his memoirs set forth his view of life, explaining that to nature,

> the continued existence of the species is everything, the individual is nothing; she (nature) carries on an immense waste of seeds, but the individual, after she has given it – the mature one – opportunity to pass on its seed to the future, she heedlessly lets die; it is for her purposes without value.³⁵

**The impact of Darwinism on the German medical profession**

According to Weikart, Hitler saw Darwinism as providing the moral justification for infanticide, euthanasia, genocide and other policies that had been considered immoral by more conventional moral standards.³⁶ Evolution would achieve the ultimate goals of his policy: the biological improvement of the human species.³⁷

In 1933 the Nazi racial theorist Fritz Lenz noted ‘the German core (Kern) within the medical community has recognised the demands of German racial hygiene as its own; the medical profession has become the leading force in making these demands.’³⁸ Most members of the medical and scientific professions had been exposed to the writings of Haeckel and Ploetz as well as other prominent Darwinists including the

³⁵ ibid., p155.  
³⁷ ibid.  
physicians Ludwig Büchner and Wilhelm Schallmayer and psychiatrist Hoche with many German scholars and professionals testifying that encounters with popular Darwinist writings in their youth—especially those by Haeckel and Büchner—had been decisive in the formation of their world views.\textsuperscript{39} Richard Goldschmidt, one of the leading geneticists of the twentieth century, explained his reaction after reading Haeckel’s \textit{Natural History of Creation}: 

\begin{quote}
It seemed that all problems of heaven and earth were solved simply and convincingly…evolution was the key to everything and could replace all the beliefs and creeds which one was discarding.\textsuperscript{40}
\end{quote}

According to the physiologist Max Verworn in 1921, it could be stated ‘without exaggeration that no scientist has exercised a greater influence on the development of our contemporary worldview than Haeckel’,\textsuperscript{41} while Alfred Grotjahn, Professor of Social Hygiene at the University of Berlin, claimed that:

\begin{quote}
like hundreds of thousands of young people it [Darwinism] swept my brain clear of metaphysical conceptions at an age decisive in the development of my world view and freed me up to receive positivist views and this-worldly ethical values.\textsuperscript{42}
\end{quote}

\textsuperscript{39} R. Weikart, op. cit., p. 11. 
\textsuperscript{40} ibid. 
\textsuperscript{41} ibid. 
\textsuperscript{42} R. Weikart, op. cit., p. 12.
Karl Brandt, one of the most powerful figures in the Third Reich and Hitler’s personal doctor, was influenced by the theories of Alfred Hoche. According to Ulf Schmidt, the biographer of Brandt,

Hoche’s experiences with dying patients, his understanding of pain and human suffering, and his suggestions on how life could be painlessly shortened, resembled Brandt’s position and Hoche’s theories ‘provided the intellectual and moral basis from which Brandt would later argue his case, after Hitler had asked him to implement such a programme and also during the Nazi Doctor’s trial.43

According to the biographers of Dr Joseph Mengele one of the earliest influences on the student doctor was Dr Ernst Rudin, whose lectures Mengele regularly attended and who was one of the architects of Hitler’s compulsory sterilisation laws.44 Rudin along with some of the leading members of the medical profession such as Hoche and Binding was a leading proponent of the theory that doctors should destroy ‘life devoid of value’.45

Thus by the process of education and formal teaching and political and social persuasion, racial hygiene had already become ingrained in German medical thinking and practice. All Hitler and his fellow racists had to do was distort the relevance of

45 ibid.
the Nordic supremacist idea over other equally strong ones, in order to achieve broad adherence to their will.\textsuperscript{46}

As Robert Proctor argues, the Nazis found ‘biology and medicine a suitable language in which to articulate their goals; while scientists found the Nazis willing to support many of their endeavours’.\textsuperscript{47} Gerhard Wagner, leader of the German medical profession stated:

> Knowledge of racial hygiene and genetics has become, by a purely scientific path, the knowledge of an extraordinary number of German doctors. It has influenced to a substantial degree the basic world view of the State, and indeed may even be said to embody the very foundations of the present state (Staatsraison).\textsuperscript{48}

\textit{Baur-Fischer-Lenz}, which was the leading German textbook on the subjects of genetics and eugenics for two decades, stated that ‘physics and chemistry…are held up before biologists as the exemplars of exact research,’ and claimed that genetics, like the physical sciences, was based on ‘precise data’ obtained from ‘numerous measurements’ and ultimately ‘based on experiments’.\textsuperscript{49}

\textsuperscript{46} A. Pasternak, \textit{Inhuman Research}, op. cit., p. 15.

\textsuperscript{47} R.N. Proctor, \textit{Racial Hygiene: Medicine under the Nazis}, op. cit., p. 45.

\textsuperscript{48} ibid.

Prior to Hitler’s coming to power, almost 20 universities had established departments of racial hygiene while most of the journals on racial hygiene had also been established. The famous and prestigious Kaiser Wilhelm Gesellschaft (KWG) provided the funding and support for the Kaiser Wilhelm Institute for Anthropology in Berlin and the Kaiser Wilhelm Institute for Genealogy in Munich to consider research into racial hygiene a priority and to play a central role in constructing the ‘genetic registries’ later used to round up and deport Jews and Gypsies (for execution).\textsuperscript{50}

After the war, the German psychologist Alexander Mitscherlich accepted a commission to investigate the crimes of high-ranking German physicians in the Third Reich. He concluded that the collusion between the planners and executors of these crimes could never have materialised, were it not for the readiness, the connivance and the moral apathy of a large intermediate stratum of society of which the medical and academic community were an integral part.\textsuperscript{51} Pasternak supports his conclusion maintaining that the German medical profession acted as an extension of the regime, that a perversely skilful manipulation of the German medical profession coupled with the co-optation of scientific practices, population genetics theories, disease models and the language of hygiene allowed the Nazi program of racial cleansing to reach such extremes.\textsuperscript{52} He argues further that had the medical community rejected a specific set of assumptions critical to legitimising Nazi racial policy – the two most important being that humankind can be divided into genetically distinct unequal races according to objective, verifiable criteria, and that the proportion of pure and superior ‘German’

\textsuperscript{50} R.N. Proctor, Racial Hygiene: Medicine under the Nazis, op. cit., p. 45.
\textsuperscript{52} A. Pasternak, Inhuman Research, op. cit., p.15
population in Germany was declining in relation to inferior racial groups – the doctors may have resisted Nazification more actively perhaps even preventing some of the horrors associated with the later years of the war.\(^{53}\)

**Racial Cleansing and Medical Ethics**

It is argued that the Nazis, particularly the Nazi doctors, abandoned ethics. However, this is a myth: Nazi doctors and their medical associates were not without ethics but were, in fact, adhering to and fanatically believed in a coherent yet destructive code of morality and ethics based on ridding German society of the sick, the weak, the poor, the disabled, minority groups and, most importantly, the Jews.

By the time of the introduction of the Nuremberg Code in 1946 there were two existing ethical guides in the western world both of which had originated in Germany. The first concerned legislation drawn up in Prussia in December 1900 to cover the ethics of human experimentation and to give directives for competency, consent, proper advice and explanation of the procedures, and accountability. The legislation was issued following public outcry over experiments with prostitutes and orphans who had been injected with syphilis to test new treatments. Consent had not been obtained from any of the subjects or their legal guardians. Legal and legislative debate

\(^{53}\) ibid.
ultimately led to the 1900 Instructions to the Directors of Clinics, Out-Patient Clinics and Other Medical Facilities.\textsuperscript{54}

The second legislative decision was reached in 1931 as a result of a major scandal in Lübeck, Northern Germany, when 75 children died in the course of experiments with tuberculosis vaccinations. The trial following the catastrophe resulted in the first public debate on medical ethics in Europe, and wide-spread public criticism of the German medical profession within the health community. Alfons Stauder, a member of the Reich Health Office described the state of medical research as:

naked cynicism; placing the lives of small children on the same level as those of experimental animals (rats), dubious experiments having no therapeutic purpose; science sailing under false colours; crimes against the health of defenceless children; lack of sensibility; mental and physical torture…disgustingly shameful abominations in the name of science run mad.\textsuperscript{55}

The public debate led to the establishment of the 1931 Richtlinien, the first regulations for medical research on human beings in the western hemisphere. The guidelines were issued in a Reich Circular on 28 February 1931 as Regulations on New Therapy and Human Experimentation (Appendix VII).\textsuperscript{56} The fourteen points of the code were in

\textsuperscript{54} G.J. Annas and M.A. Grodin, The Nazi Doctors and the Nuremberg Code, op. cit., p. 127.
\textsuperscript{55} Annas & Grodin, op. cit., p. 128.
\textsuperscript{56} ibid., p. 129.
many ways more extensive than either the subsequent Nuremberg Code (Appendix VIII) or the later Declaration of Helsinki (Appendix IX) recommendations.\(^5^7\)

However, despite their failure to observe these points of legislation, German doctors prior to and after 1933 believed they were working within a moral and ethical framework, one based on eugenics and racial hygiene emanating from Darwin’s theory. As stated earlier, their sense of morality and ethics had also been influenced during their student days observing ‘their teachers, reading about their scientific investigations and their uses and abuses of patients’\(^5^8\). According to Katz, however different they were in degree of torture and brutality, the experiments conducted in the early period of the century were precursors to what transpired at Auschwitz.\(^5^9\) Katz quotes a Nazi doctor defendant at the Nuremberg Medical Trials (1946), Dr Helmut Poppendick: ‘I knew (from my student days) that the modern achievements of medical science had not been brought about without sacrifices.’

Regardless of the gravity and severity of the proposals put forward by racial theorists and scientists, the impact of both the theory of evolution and the practical experience and education of doctors had significant moral and ethical implications. These changed medical ethics such that the nation as a people, the \(\textit{Volk}\), took precedence over the individual. Within the biological sciences theories of human inequality began to emerge as matters of scientific fact.\(^6^0\) One of the leading German Darwinian

\(^5^7\) ibid.
\(^5^9\) ibid.
biologists, Arnold Dodel, argued that the theory of evolution required a new world view: ‘we have to construct new ethics…all values will be re-valued’.  

There is a certain irony regarding the subject of ethics and human experimentation during the Nazi era in that in 1933 the Nazis passed a law to prevent cruelty towards animals with particular emphasis on the prohibition of operations or treatment that would cause suffering or pain. This prevented the use of animals as an alternative to human experimentation, the law stating:

> [A]ll operations or treatments which are associated with pain or injury, especially experiments involving the use of cold, heat, or infection, are prohibited, and can be permitted only under special exceptional circumstances.

As stated by Annas and Grodin, in so far as the 1931 Guidelines had any force of law, their stipulation that animal experimentation precede any trials on humans would have been revoked by this 1933 Nazi legislation. They argue that if the 1933 legislation had been interpreted on the basis that human beings were a type of animal, human experimentation could have been outlawed (ibid.). However, the premise of this argument is weak as demonstrated by the actions of Hitler’s government and particularly the Nazi doctors and academic researchers who abandoned all forms of

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61 Weikart, op. cit., p. 43  
63 ibid., p. 132.
normal medical ethics to satisfy national and security demands, racial ideology and personal ‘scientific’ goals.

**Conclusion**

During the nineteenth century science was considered to provide the answers to many social and medical problems of the day, and racial science in particular gained a position of privilege and prestige within German society that cannot be understated. It could be argued that the introduction of the Theory of Evolution marked the commencement of a new age of medical and scientific enlightenment with Germany at its forefront. With the new science came a different world view, particularly in Germany where a new ethic centred on the purification of the nation whereby the individual was expendable in the interests of the health of the *Volk*. By the time of Hitler’s rise to power the Third Reich’s ‘national community’ was based on the exclusion of all those considered *alien, useless eaters, asocial* and *hereditarily sick*.

While most governments and scientists of western countries had adopted Darwinian evolutionary theory by the late nineteenth century, Germany led the way both in medical research and the advocacy of eugenics and euthanasia. And within Germany, it was the medical community, the leading psychiatrists, geneticists, anthropologists, physicians and academics, who were at the forefront of advocating euthanasia of the mentally and physically disabled. The German government had created chairs of Racial Hygiene at over 20 universities throughout the country well before Hitler’s coming to power. However the magnitude of the racial hygiene program that was put into place after 1933 could not have occurred without the commitment of Hitler and
the Nazi machine. Nevertheless, none of it could have been accomplished without the active and tacit approval and participation of the medical community.
Chapter 3: The Nazi Doctor and Racial Medicine

5. Leaflet from the Nazi journal New People circa. 1937, reads “60,000 reichsmarks is what this hereditarily ill person will cost the national community over the course of his life. Citizen, this is also your money!”

6. Qualitative Decline in the Population through Lower Reproductive Rates among individuals of Higher Value: In the beginning, after 30 years, after 60 years, after 90 years, after 120 years. It could come to this if individuals of lesser value have four children and those of higher value have two. Nazi propaganda poster, circa. 1938, used to promote public support for the mass sterilization program.
Chapter 3: The Nazi Doctor and Racial Medicine

Everything that was considered until now as the holiest obligations of medicine – to care for the sick without paying attention to their race, to deal in the same way with all diseases, to help ill men everywhere and ease their pain – all this is viewed by the National-Socialists as sheer sentimental stuff which should be thrown away. The only matter of importance in their eyes is leading a war of annihilation against the less worthy (Minderwertige) – the incurable patients...If this line of thought will win the upper hand, the German medical profession will lose its ethical norms...the physician will act as a killer, the doctor will become a murderer.64

For decades German geneticists had been advocating racial hygiene measures they claimed would improve the health of the nation and rid the German race of imperfections. The Nazis’ seizure of power in 1933 provided the first opportunity to implement a specific policy to do so, one which entailed an irrevocable and deadly link between medicine and Social Nationalism. One of the main instruments for achieving the goal of a racially pure German nation was the enactment of legislation which took the form of decrees of which the Jewish people bore the brunt. It began as

early as 1933 with the passing of the *Law for the Protection of Genetically Diseased Offspring (Gesetz zur Verhütung erbkranken Nachwuchses)* or *Sterilization Law*, and was followed with the 1935 *Nuremberg Laws*. These laws made clear that the Nazi state would be dedicated to protecting its German Aryans from ‘infection’ or ‘pollution’ through contact with non-Aryans, especially Jews, and left no doubt that racial hygiene was to be transformed into full blown racism. The medical profession welcomed the policy, the President of the German doctors’ association, the *Deutscher Ärztevereinsbund* and *Hartmannbund*, issuing the directive: ‘What we have to do today is build a firm foundation for the genetic development of the nation. German physicians are called upon to participate in this work through their practical assistance.’

In 1929, at the Nuremberg Nazi Party Congress, a number of doctors (forty-two men and two women) formed the National Socialist Physicians League to coordinate Nazi medical policy and purify the German medical community of ‘Jewish Bolshevism’. The league’s principal role was one of ‘providing the (Nazi) party and future state leadership with experts in all areas of public health and racial biology.’ The German medical community did not let Hitler down. The organisation was a success attracting by early 1933, approximately 2800 members or six percent of the entire German medical profession. By 1934 the waiting list to join was so great that *Ziel und Weg*, the official journal of the league, advised doctors to make no further applications until

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68 ibid.
the present ones had been processed. By 1942 membership records for the league indicate a membership of nearly 40,000 physicians. By 1942 an estimated 47% of all doctors had joined the Nazi Party and approximately 7% of all doctors had joined the SS. The latter figure is compared with less than half of 1 percent of the general public. These figures far outnumber those of other professions such as teachers, law practitioners, and bankers.

Furthermore, far-reaching and decisive changes in the structure of German medical practice also took place. The most important was the unification of the medical profession (gleichgeschaltet) – literally, coordinated or unified – into a single hierarchical structure with a vertical chain of command culminating in the National Socialist Physicians’ League, which was in turn subordinated to the National Socialist party. The League was organised on the Führer principle (Führer-prinzip) based on the theory that responsibility for every aspect of medicine was ultimately to rest with a single leader. The new regime influenced medical education, the structure and priorities of medical research, and, most importantly, who could or could not participate in German medical science and practice. It also reflected a broader shift in the philosophy of German medical practice. Proctor refers to the philosophical dimension as follows:

health care (Gesundheitsfürsorge) was to be replaced by health leadership (Gesundheitsführung); curative medicine (Fürsorge) was to be replaced by

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69 ibid.
70 ibid., p. 66.
71 R.N. Proctor, Racial Hygiene: Medicine under the Nazis, op. cit., p. 70.
72 ibid., p. 72.
73 ibid., p. 74.
preventative medicine (Vorsorge); and individual hygiene was to be complemented by racial hygiene.\textsuperscript{74}

The Nazi doctor embraced the move from being predominantly responsible for the individual patient to being a doctor of the nation. According to Nazi medical philosophers, the shift from health care to health leadership also implied recognition of the importance of distinguishing between valuable forms of life and life ‘not worth living’.\textsuperscript{75} Once the Nazis came to power, the medical profession were elevated to a new level of professional status while allegiance to the political agenda of the Nazi regime was to be tested with the introduction of the sterilization laws and the implementation of the euthanasia program.

Table 3.1. below shows the systematic implementation of legislation to discriminate against ‘non-Aryans’ and to legalise the sterilisation programme and to pave the way towards the euthanasia programme, the medical experiments, and the Final Solution.

\textsuperscript{74} ibid., p.73.
\textsuperscript{75} ibid.
Table 3.1. German racial legislation

<table>
<thead>
<tr>
<th>Date</th>
<th>Legal Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 April, 1933</td>
<td>Civil Service Law; required proof of Aryan ancestry and political reliability to hold government office (Gesetz zur Wiederherstellung des Berufsbeamtenums)</td>
</tr>
<tr>
<td>14 July, 1933</td>
<td>Sterilisation Law; legalised sterilisation of those deemed genetically inferior (Gesetz zur Verhütung erbkranken Nachwuchses)</td>
</tr>
<tr>
<td>29 September, 1933</td>
<td>Farmers declared racial stock of nation; heirs of family farms required to be ‘of German or related blood’ (Reichserbhofgesetz)</td>
</tr>
<tr>
<td>24 November, 1933</td>
<td>Law against Dangerous Habitual Criminals, or Castration Law; legalised castration of sex offenders (Gesetz gegen gefährliche Gewohnheitsverbrecher und über Massnahmen der Sicherung und Besserung)</td>
</tr>
<tr>
<td>15 September, 1935</td>
<td>Blood Protection Law; marriage or sexual relations barred between Jews and Germans (Gesetz zum Schutze des deutschen Blutes und der deutschen Ehre)</td>
</tr>
<tr>
<td>18 October, 1935</td>
<td>Marital Health Law; certificate of ‘health’ required for marriage (Gesetz zum Schutze der Erbgesundheit des deutschen Volkes)</td>
</tr>
<tr>
<td>4 November, 1935</td>
<td>Citizen Law; ‘citizens’ distinguished as nationals of German or related blood; Jews deprived of civil rights (Reichsbürgergesetz)</td>
</tr>
<tr>
<td>1 September, 1941</td>
<td>All Jews in Germany required to wear Star of David (Polizeiverordnung über die Kennzeichnung von Juden)</td>
</tr>
</tbody>
</table>

Source: *Racial Hygiene: Medicine under the Nazis* (R.N. Proctor, op.cit., p.103)
The Sterilisation Program

The Sterilisation Law legislated in 1933 endorsed the sterilisation of patients with epilepsy, schizophrenia, manic depressive disorders or mental retardation, as well as alcoholics and any other persons regarded as somehow genetically inferior. Apart from legalising the medical intervention, the law also lent social legitimacy to the sterilisation of anyone deemed to have inferior and undesirable traits. Although legislation was before the German parliament in late 1932, it was the Nazis in July 1933 who passed legislation that allowed for the compulsory sterilisation on ‘eugenic indications’.\(^76\) This law was intended to be eugenic rather than punitive, sterilisation described as the sacrifice an individual makes as a result of the ‘personal tragedy’ of having been born defective.\(^77\) Despite this claim some believed sterilisation contributed to the reduction in crime as argued by one prison cleric, ‘when one reflects upon the fact that some proportion of the genetically ill are also morally defective and have broken the law, then one can easily understand how important sterilisation may be in helping to reduce criminality.’\(^78\)

The law provided for the establishment of a network of genetic and appellate courts which decided each case. By 1934 there were 181 such courts consisting of a panel of two doctors and a lawyer. Every German doctor had become a ‘genetic doctor’ responsible for incorporating racial hygiene into his medical judgments.\(^79\) As such, doctors were required to report the birth of any baby born with genetic defects and patients were no longer to be treated as individuals but as members of the Volk; the

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\(^{77}\) ibid., p. 102.

\(^{78}\) ibid.

The doctor’s primary allegiance would be transferred from his patient to the State.\textsuperscript{80} The success of the program and the willingness of German doctors to embrace the new legislation is evident from the statistics which estimate that 400,000 people were sterilised or castrated during the Nazi regime.

The Nazi government’s public propaganda programs were quite transparent in their attempts to ensure general public support for the new sterilisation laws and their implementation. The Hitler Youth instruction book \textit{About the German Nation and Its Living Space}, for example, warned that the ‘less worthy’ were increasing at a rate six times that of ‘healthy’ people and argued that those unworthy of life were a great cost to the German economy for the maintenance and care they required.\textsuperscript{81} Schoolbooks introduced the economics of racial hygiene in maths problems: ‘The construction of an asylum costs six million marks. How many new houses at 15,000 marks apiece can be built for this sum?’\textsuperscript{82} Films such as \textit{Victims of the Past} (1937), which the German people were instructed to view during April; the month of Hitler’s birthday, were produced. Highlights of this twenty four minute film included images of monumental lavishly furnished asylums inhabited by the mentally impaired interjected with hereditarily healthy people inhabiting slums. ‘Racially valuable’ nurses were shown feeding and attending to clearly ‘inferior’ helpless inmates.\textsuperscript{83} The message: the future of the nation was at risk.

Considerable time and resources were made available for research aimed at sterilising as many people as possible not only to rid Germany of ‘useless eaters’ but in answer

\textsuperscript{80} ibid.
\textsuperscript{81} D. Dwork and R.J. Van Pelt, \textit{The Third Reich}, op. cit., p. 164.
\textsuperscript{82} ibid.
\textsuperscript{83} ibid.
to Germany’s critical labour shortage: It was Victor Brack, head of Hitler’s Chancellery, who suggested the solution in a letter to Himmler on June 23 1942:

[Almong the 10 million European Jews there are, according to my estimates, at least two to three million men and women fully capable of working. In view of our enormous problems with the shortage of labor, I am of the opinion that these 2-3 million (should) by all means be selected and preserved. However, this can only happen if they are simultaneously made infertile.]^{84}

At a conference on sterilisation held in July 1942, Himmler appointed Professor Carl Clauberg, a gynaecologist and specialist in the treatment of female infertility, to develop an appropriate sterilisation technique. Himmler refers Clauberg to Ravensbrück, then to Auschwitz:

Translation of Document No-213

Office of U.S. Chief of Counsel

Reichführer SS

Personal Staff

Führer Headquarters 10. July 1942

Top Secret

Professor Clauberg (handwritten remark): W1-10, 1-5-43, 10-7-43

Dear Professor:

...Before you start your job, the Reichsführer SS would be interested to learn from you how long it would take to sterilize a thousand Jewesses. The Jewesses themselves should not know anything about it. As the Reichsführer SS understands it, you could give the appropriate injections during a general examination.

Thorough experiments should be conducted to investigate the effect of the sterilization largely in a way, that you find out after a certain time, which you would have to fix perhaps by x-rays, what kind of changes have taken place.\textsuperscript{85}

Clauberg began immediately at Birkenau women’s hospital, transferring his ‘research’ work to the infamous Block 10 in Auschwitz by April 1943. Under the pretext of a health examination women who had given birth and whose menstrual cycle was still active were checked for the condition of their Fallopian tubes. They were subsequently sterilised by the injection of ‘a special chemical irritant which produced a state of severe inflammation’,\textsuperscript{86} causing the Fallopian tubes to occlude and the women to become infertile. The procedure was not without complications, some victims suffering high fever and general septicaemia which in most cases led to death.\textsuperscript{87} Those who survived the ordeal were often put to death in order that autopsies could be performed. In a communiqué to Himmler on the progress of the experiments, dated 7 June, 1943 Clauberg wrote:


\textsuperscript{86} ibid., p. 349.

\textsuperscript{87} A. Pasternak, \textit{Inhuman Research}, op. cit., p. 352.
My method for the non-surgical sterilization of women is almost perfected… As for the Reichführer’s enquiries about how long it will take to sterilize 1,000 women using this procedure, I am today able to provide the following answer: if my experiments continue to provide the sort of results that they have yielded so far, and there is no reason to suppose that it will be otherwise, then I shall be able to report in a short time that it will be possible for one trained physician in a suitably prepared facility and with the help of ten assistants to carry out in one day, in all probability, the sterilization of several hundred or even a thousand women.\footnote{Strzelecka, I. et al., Auschwitz 1940-1945: Central Issues in the Camp, Volume II, Oświecim, Auschwitz-Birkenau State Museum, 2000. p.352}

Another method of mass sterilisation which was researched used x-ray therapy on both male and females. This was carried out by SS-Sturmbannführer Horst Schumann M.D. who was searching for the optimal means of mass sterilisation, so that the Third Reich would be able to exterminate conquered nations by the ‘scientific method’ of eliminating births.\footnote{I. Strzelecka et al., Auschwitz 1940-1945, op. cit., 353.} The procedure involved the application of various doses of radiation to men’s testicles and women’s ovaries. Some of the subjects were then subject to further suffering through castration and removal of ovaries in order to carry out tests of the irradiated organs and obtain histological samples for comparison to healthy tissue. Many of these subjects died of septicaemia or internal haemorrhages. It is estimated that less than one hundred of the approximately one thousand...
experimental subjects used by Clauberg and Schumann survived. In the end sterilisation by irradiation proved unsatisfactory.\textsuperscript{90}

\section*{The Euthanasia Program}

From the late nineteenth century throughout western countries euthanasia had been discussed and debated and was the subject of many journal articles by eminent geneticists, biologists and physicians. However, it was in Germany under Hitler that a euthanasia program was implemented. The program was announced by Hitler in September 1939 the aim of which was ‘enlarging the authority of certain physicians to be designated by name in such a manner that persons who, according to human judgment, are incurable, can upon a more careful diagnosis of their condition of sickness, be accorded a mercy death’.\textsuperscript{91}

Implementation of the program was made the responsibility of Viktor Brack, office chief in the Kanzlei des Führers while Herbert Linden of the Reich Ministry of Interior (RMdI) developed plans and issued directives to identify victims, recruit physicians and establish killing wards in specific hospitals.\textsuperscript{92} A ‘\textit{Reich Commission for the Registration of Severe Disorders in Childhood}’ was created with the express purpose of administering euthanasia to children who had mental or physical disorders. Leading paediatricians such as Professors Werner Catel, Head of the paediatric clinic

\textsuperscript{90} A. Mitscherlich and F. Mielke, op. cit., pp. 356.
\textsuperscript{92} H. Friedlander, \textit{The Origins of Nazi Genocide}, op. cit., p. 44.
in Leipzig, Hans Heinze, Head of the State Institute at Görden, and Ernst Wentzler, a paediatric psychiatrist, were on the committee which selected the children under four years of age who fell within certain categories of disability to be put to death. Every midwife and doctor was to report the birth of a child with any sign of deformity to the authorities whereupon, as per the instructions from Hitler, they were assessed by the selection committee and if found to be abnormal were put to death. The directive stated that:

… for the clarification of scientific questions in the field of congenital malformation and mental retardation, the earliest possible registration was required of all children under three years of age in whom any of the following ‘serious hereditary diseases’ were ‘suspected’: idiocy and mongolism…microcephaly; hydrocephaly; malfunctions of all kinds, especially of limbs, head, and spinal column; and paralysis, including spastic conditions.

At an asylum at Egelfing-Haar, its director Dr Hermann Pfannmüller, was reported to have referred to a group of children in cots:

We have here children aged from one to five…all these creatures represent for me as a National Socialist ‘living burdens’… a burden for our nation…In this sense, the Führer’s action to free the national community

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93 ibid.
from this overburdening is quite simply a national deed…we do not carry out the action with poison, injections or other measures which can be recognised…No our method is much simpler…naturally, we don’t stop their food straight away. That would cause too much fuss. We gradually reduce their portions. Nature then takes care of the rest…this one won’t last more than two or three more days.\textsuperscript{95}

Five thousand children were killed in this way.\textsuperscript{96} In later years the same selection committee made recommendations and decisions that would determine the fate of adolescents.\textsuperscript{97}

In 1939 the euthanasia program was extended to the killing of handicapped adults. Those selected to die were sent to one of twenty eight hospitals where the method of killing varied from starvation, to phenol injection to gassing. Being more efficient and less emotionally demanding on personnel, gassing became the most common method, initially using exhaust fumes from mobile gas vans.

Selection occurred through the mental institutions which were visited by a team of psychiatrists and physicians who assessed the inmates and completed a questionnaire. However, careful medical examination was seldom the rule and the majority of decisions were made at ‘T4’ purely on the basis of the questionnaire (See

\textsuperscript{95} Cited in D. Dwork and R.J. Van Pelt, \textit{The Third Reich}, op. cit., p. 165.

\textsuperscript{96} D. Dwork and R.J. Van Pelt, op. cit., p. 165.

Appendix X). 98 T4 was the code name of the camouflage organisation for medical killings, *the Reich Work Group of Sanatoriums and Nursing Homes*, which derived its name from its Berlin address: Tiergarten 4. 99 Here Hans Hefelmann with the assistance of three physicians would determine who was to die and who was to live. The number of patients killed under the Euthanasia program is estimated to lie between 70,000 to 200,000. Officially over 70,000 people were killed through the T4 program. However, through a program known as ‘wild euthanasia’ which was the autonomous management of massacre through the use of lethal injections and starvation, an additional 140,000 victims met their death. 100

The T4 procedure was more formal compared to the ‘euthanasia’ practices carried out in places such as Poland, West Prussia and Pomerania where mental patients were shot without any examination. Giving an account of his troops to Himmler in January 1940 the head of the SS and Police of Danzig and West Prussia wrote:

> [T]he other two units of storm troopers at my disposal were employed as follows: during October, November and December…for the elimination of about 4400 incurable patients from Polish mental hospitals…for the elimination of about 2000 incurable patients from the Konradstein mental hospital. 101

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Another major killing site of the handicapped was the Piasnitzer forest, northwest of Gdynia, where some 10,000 people were killed and buried.\textsuperscript{102}

Eliminating the handicapped significantly reduced the cost of medical services, the savings from which could be applied to the war effort. Furthermore, ridding the state of these ‘genetically inferior’ people ensured a further step towards the purification of the German blood. In addition to the mentally and physically disadvantaged, by early 1940 all Jewish inmates in institutions in Germany were murdered under directions from T4. No special reasons or examinations were deemed necessary for the extermination of this entire group of asylum inmates; it was simply one of the decisions forming part of the ‘radical solution’ of the Jewish problem.

The euthanasia program became the testing apparatus and vehicle for the Final Solution, the method used by T4 to kill the ‘useless eaters’ proving itself effective and efficient. Thus when it came to the decision to implement the Final Solution, the means, that is the gas, the equipment, the crematoriums and, most importantly, the personnel in the form of the Nazi doctor, were already in place. An example can be seen in Christian Wirth, who went from being administrative director of Grafeneck extermination clinic to become the senior officer in charge of extermination camps such as Treblinka, Sobibor and Belzec.\textsuperscript{103} Viktor Brack, one of the Aktion T4 leaders to testify at the Nuremberg trial, stated in relation to the discontinuation of the Euthanasia Program that he had been instructed to send the personnel who worked on...


the program to Lublin to be placed at the disposal of SS Brigadeführer Globocnik. He testified:

I then had the impression that these people were to be used in the extensive Jewish labour camps run by Globocnik. Later, however, at the end of 1942 or the beginning of 1943, I found out that they were used to assist in the mass extermination of the Jews which was then already common knowledge in higher party circles.  

**Conclusion**

The introduction of the genetic and hereditary laws from 1933 to 1935, which set the stage for a significant psychological shift within the German medical community as a whole, in practice legalized sterilisation and gave quasi consent to the clandestine euthanasia program between 1939 and 1941.  

Both programs were an unqualified success with approximately 400,000 persons sterilised and 70,273 ‘disinfected’, the latter ridding German asylums of all Jewish inmates. This could not have been achieved without the co-operation and active participation of the German medical and scientific community. The physicians in particular believed they were working for a better, healthier German Nation, paradoxically perceiving themselves as the healers of a sick nation. Asked at the Nuremberg Medical Trials whether he felt any blame for

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104 ibid., p. 142.
the euthanasia program, Karl Brandt answered: ‘No. I do not feel myself to blame. I have a perfectly clear conscience...I was actuated by purely humane sensibility’.107

107 A. Pasternak, op. cit., p. 22.
Chapter 4: Human Experimentation

7. Gypsy children who were subjects of Mengele’s research at Auschwitz between 1943 and 1945. The original photograph was found in Mengele’s files after the war.


9. A prisoner who has been subjected to low pressure experimentation.
Chapter 4: Human Experimentation

Following the subsequently induced death of the Jew, whose head should not be damaged, the delegate will separate the head from the body and will forward it to its proper point of destination in a hermetically sealed tin can, especially produced for this purpose and filled with a conserving fluid.¹⁰⁸

Experimentation on humans during the Nazi era was essentially carried out for three reasons: Firstly, to ensure that the German nation would eventually be of pure Aryan blood as foreseen by the racial hygiene program; secondly, to enhance and protect the health of the nation and, in particular, of the military forces in the name of national security; and thirdly, to satisfy the interests, ambitions and even whims of certain prominent Nazi doctors. Ordinary doctors, specialists, university professors and heads of medical institutes and research centres were involved in these experiments, their level of

participation ranging from passive co-operation to outright murder. According to Nuremberg Medical Trials Prosecutor Taylor, the 23 physicians on trial in the Nuremberg Trials were representative of the whole German medical profession from internationally regarded leaders of the science to its dregs.\textsuperscript{109} All these doctors had shown:

\begin{quote}
[A] callous lack of consideration and human regard for, and an unprincipled willingness to abuse their power over, the poor, unfortunate, defenceless creatures who have been deprived of their rights by the ruthless and criminal government.\textsuperscript{110}
\end{quote}

The experiments related to racial hygiene included the anthropological studies of Joseph Mengele, the skeleton collection and studies of Hirt, and research on sterilisation carried out by Clauberg and Schumann whose purpose was to ensure that inferior races did not propagate. In relation to the health and survival of the armed forces and that of the German public, experimentation was much more expansive. Hypothermia, sea water and high-altitude experiments were carried out at the request of both the navy and the air force, while other experiments such as treatments for gas and phosphorous burns, and viruses and diseases such as typhus, malaria and hepatitis, were seen to potentially benefit the entire nation.

\textsuperscript{109}G.J. Annas and M.A. Grodin, \textit{The Nazi Doctors and the Nuremberg Code}, op. cit., p. 89.

\textsuperscript{110}G.J. Annas and M.A. Grodin, \textit{The Nazi Doctors and the Nuremberg Code}, op. cit., p. 87.
In relation to the third category of experimentation, Pross discusses the work of certain eminent physicians who did not necessarily work at the concentration camps but who mentored and encouraged those who did receiving both information and samples from experiments undertaken at the camps.\textsuperscript{111} Professor Herman Voss, from Posen University’s school of anatomy conducted experiments on the content of blood in the spleen using ‘material’ from the guillotine of the Posen Gestapo. Dr Herman Stieve, Director of the Institute of Anatomy of Berlin University, conducted experiments on female prisoners from the Plötzensee prison and the Ravensbrück concentration camp in which he studied the effect of severe stress on the female menstrual cycle by examining the irregularity of bleedings in women after they learned about their imminent execution.\textsuperscript{112} Probably one of the most famous physicians notorious for following the Nazi cause was Professor Eduard Pernkopf, Director of the Institute of Anatomy of the University of Vienna and editor of a landmark reference book on human anatomy. Pernkopf was wholly committed to the ideology of a pure German race and transformed the University of Vienna’s medical faculty into a vehicle of the Hitler state in which he could exploit the victims of Nazi terror to advance his work as an anatomist.\textsuperscript{113}

Under the Nazi regime, medical and scientific research was free to follow any pursuit of knowledge and prestige which was seen to serve the State’s war-time needs or the pursuit of its racial hygiene ideology. While scientists during the late nineteenth century and early part of the twentieth century had used either animals or themselves as guinea pigs,

\textsuperscript{111} ibid., p. 32.

\textsuperscript{112} G.J. Annas and M.A. Grodin, op. cit., p. 37.

Nazi doctors argued that far better results could be achieved by experimenting on humans (Doctors Rose and Conti, Brandt and Gebhardt, and Dr Clauberg used this as justification for their human experiments with typhoid fever, phosphorous burns and sterilisation respectively). It was also patently obvious that in the concentration camps they had a vast pool of readily available human ‘guinea pigs’ with which to conduct more authentic testing.

Extracts from correspondence between Grawitz and Himmler – See Appendix XI

Doc. No. 20-179

Berlin 28 June 1944

To: Reichführer – SS Himmler

Field Headquarters

Secret Command

The chief of the medical service of the air force (Luftwaffe) is asking in the enclosed secret command document to carry out tests on prisoners in order to check two apparently promising simple procedures to make seawater drinkable.

According to your order dd. 15.04.44, Reichsführer, I obtained statements from SS Group Leader Prof. Dr. Gebhardt, SS Group Leader Glück and SS Group Leader Hebe. The wording is as follows:

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115 Archive Yad Vashem Israel, obtained February 2007
1. SS group leader Prof. Gebhardt: I consider it very important to support the air force in every possible way and to appoint a supervising internist of the Waffen SS for the tests.

2. SS group leader Glücks: With reference to the above correspondence we are informing you that there are no objections whatsoever from this end against the proposed test series in the experimental station as requested by the head of the medical services – Rascher. If possible, Jews or prisoners from the quarantine station should be used.

3. SS group leader Hebe…illegible

With reference to the suggestion of group leader Hebe, to carry out the tests on gypsies, I take the liberty to point out that the test results with gypsies could possibly produce best results, which might not be applicable to our men due to partially different racial composition of those. For this reason it would be desirable if such prisoners could be used who are racially comparable to the European population.

I humbly ask your permission so that the tests can get started.

Heil Hitler

Grawitz

To discuss the actual experiments that were conducted in full lies beyond the scope of this study; however, a brief summary of some of the main experiments follows.
High-altitude experiments were conducted at Dachau concentration camp from March to August 1942 under the supervision of Dr Sigmund Rascher, an SS officer and captain in the German air force. The aim of the experiments was to investigate the limits of human endurance at extremely high altitudes, and involved locking the victim in an airtight, low-pressure chamber simulating the atmospheric conditions in altitudes of up to sixty-eight thousand feet. Many of the victims died; all suffered.

Prosecution Exhibit 66, NO-402 states:

At 49200 feet, the experimental subject let the mask fall and suffered severe altitude sickness and clonic convulsions…at 23600 feet he had uncoordinated movements with his extremities…at 19690 feet he had clonic convulsions and was groaning…at 18040 feet he yelled loudly…at 9520 feet he was yelling and convulsing his arms and legs…at 6560 feet he yelled spasmodically, grimaced and bit his tongue…at zero feet he did not respond to speech and gave the impression of someone completely out of his mind.116

Ironically, the experiments allowed no practical conclusions to be drawn since the vital element of extreme cold had not been included.\textsuperscript{117} It is evident that the doctors were aware that these experiments could lead to the death of their subjects. The following is extracted from a letter by Rascher to Himmler, requesting permission to use humans in experiments. The relevance of this letter is it officially requests permission to use humans, and it acknowledges that the subjects may die during the experiments.

\begin{flushleft}
Sigmund Rascher, M.D. \hfill (stamp)

Personal Staff Reich Leader SS

Archives File No. Secret/58

München

Trägerstrasse, 56 \hfill 15 May 1941
\end{flushleft}

Highly esteemed Reich Leader,

…For the time being, have been assigned to the Luftgau Kommando VII, for a medical selection course. During this course, where research on high-altitude flying plays a prominent part, determined by the somewhat higher ceiling of the English fighter planes, considerable regret was expressed that no experiments on human beings have so far been possible for us because such experiments are very dangerous and nobody is volunteering. I therefore put the serious question: is there any possibility that two or three professional criminals can be made available for these

\textsuperscript{117} K.G. Feig, \textit{Hitler’s Death Camps}, op. cit., p. 56.
The experiments, in which the experimental subject of course may die, would take place with my collaboration...I had an absolutely confidential talk with the representative of the Luftwaffe physician who is conducting these experiments. He also is of the opinion that the problem in question can only be solved by experiments on human beings. (Feeble-minded individuals also could be used as experimental material).  

The following letter written by Rudolf Brandt on behalf of Himmler’s office, represents the first instance in which Himmler agrees to experiments on human subjects.  

(Stamp illegible May 2 (?) 1941)  

SS Untersturmführer Sigmund Rascher M>D>  
München  
Trägerstr, 56  
Dear Dr Rascher,  

Shortly before flying to Oslo, the Reich Leader SS gave me your letter of 15 May 1941, for partial reply. 

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119 A. Pasternak, op. cit., p. 82.
I can inform you that prisoners will, of course, be gladly made available for the high-flight researches. I have informed the Chief of the Security Police of this agreement of the Reich Leader SS, and requested that the competent official be instructed to get in touch with you…

By order

Heil Hitler!

(Initials) R Br (Rudolph Brandt)

SS Sturmbannführer

Seventy eight men were killed in these experiments.

The judgment at the trial observed that the doctors, particularly Rascher and Hippke, Chief of the Luftwaffe Medical Section, must have known that ‘their tests were only the wildest kind of experimenting’ and that their recklessness with human lives could only be described as murder. An expert witness, Ivy, had previously dismissed the notion that this experiment had been necessary to determine the equipment aviators would ‘require to bail out of an airplane at high altitude’.

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123 A. Pasternak, op. cit., p. 103.
Seawater Experiments

At Dachau sea water experiments were conducted on forty-four concentration camp inmates. At the request of the German navy and air force a method was sought to desalinate sea water to render it drinkable. The experiment involved four groups of prisoners; one group received no water, the second got ordinary seawater, the third received seawater processed by the method called Berkatit which concealed the taste but did not alter the actual saline content, while the fourth group was given sea water desalinated by the Schaeffer method. However, the latter method required substantial amounts of silver which was in scarce supply and which the Technical Office of the Luftwaffe refused to supply. Accordingly, no major discovery was made, the head of the Medical Services of the Luftwaffe, Dr Oscar Schroeder, confirming that drinking salt water processed to conceal the taste but not alter the saline content could ‘produce severe symptoms of poisoning’.

According to Joseph Vorlicek, a witness at the trial of Dr Wilhelm Beiglboeck, the consulting physician to the Air Force, the victims from this group suffered excruciating torture with diarrhoea, convulsions, hallucinations, foaming at the mouth, and eventually, in most cases, madness or death.

The senselessness and tragedy of this experiment was highlighted in Taylor’s opening address when he disclosed that a ‘thinking chemist’ might within the space of a few hours have reached the same conclusions by the use of nothing more gruesome than a piece of jelly, a semi permeable membrane and a salt solution.

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124 V. Spitz, Doctors from Hell, op. cit., p. 159.
125 V. Spitz, Doctors from Hell, op. cit., p. 173.
**Malaria Experiments**

Malaria, jaundice and typhus were the principal diseases the Germans had to contend with in occupied territories. Experiments were conducted at Dachau between February 1942 and April 1945 to find a method of immunisation against malaria and to test various substitutes for quinine, the supply of which was limited. The infected victims were variously treated with Quinine, Neosalvarsan, Pyramidon, Antipyrin and several combinations of these drugs. Many deaths occurred from excessive doses of Neosalvarsan and Puramidon. Spitz relates how approximately 1100 inmates were injected with malaria-infected blood and how in order to ensure a continued source of infectious blood for other inmates three to five new victims were injected each month. By repeated inoculation, many prisoners were kept infected for up to three years. Exposure to starvation and disease particularly pneumonia, tuberculosis and typhus coupled with the debilitating effect of repeated attacks of malaria was tantamount to signing their death warrant.

Prisoner-physician, Fritz Blaha, testified before the Nuremberg Doctors Trial in January 1946 as follows:

…I autopsied bodies of people who died from these malaria experiments. 30-40 died from the malaria itself, 300 to 400 died later from diseases which were fatal because of the physical conditions resulting from malaria attacks. In

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127 A. Pasternak, op. cit., p. 68.
128 V. Spitz, op. cit., p. 104.
129 A. Pasternak, op. cit., p. 68.
addition there were deaths resulting from poisoning due to overdoses of Neosalvarsan and Pyramidon…

**Sulphanilamide Experiments**

The sulphanilamide experiments carried out at the Ravensbrück camp from July 1942 until August 1943 were aimed at analysing the sickness known as gas gangrene and to test the efficacy of known therapeutic medicaments, specifically sulphonamide. The procedure involved 15 male and 60 female inmates who were wounded by way of an incision into which bacterial cultures and wood chippings, bacterial cultures and glass, and, finally, bacterial cultures and wood and glass were ground into the wounds. The bacteria included streptococcus, gas gangrene and tetanus. The blood vessels at both ends of the wound were then blocked to simulate conditions of a battlefield wound. According to the summary of information on German Medical War Crimes, five subjects died under these experiments.

**Gas Experiments**

Gas experiments, using Lost, an asphyxiating poison gas commonly known as mustard gas, commenced in November 1939 and lasted until the April 1945. In the Natzweiler Concentration Camp experiments were carried out on approximately 220 camp inmates

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131 V. Spitz, *Doctors from Hell*, op. cit., p. 140.
132 ibid.
133 V. Spitz, *Doctors from Hell*, op. cit., p. 135.
of Russian, German, Polish and Czech nationality under the supervision of Professor Dr Hirt from the University of Strasbour. About 50 subjects died. At Neuengamme, the experiments involved mustard gas which was applied to the arms of the subjects. Within ten hours some went blind while in all cases the ‘pain was so tremendous that one could hardly stand being near the victims’.\textsuperscript{134} From the summary of the Nuremberg Military Tribunal\textsuperscript{135} it appears that following the deaths of German soldiers who had received gas-oedema serum injections, a senior physician, Dr Ding, was instructed to ascertain whether they might have died owing to the phenol content of the serum. In order to do so, he was instructed to kill several inmates of Buchenwald with phenol injections, presumably to note any similarities.

\textbf{Bone, Muscle, and Nerve Regeneration, and Bone Transplants}

The experiments on Polish inmates conducted at Ravensbrück between September 1942 and December 1943 for the supposed benefit of the armed forces were some of the most hideous and cruel. Where they did not directly result in death, they left their subjects disfigured and scarred for life. Sections of bone, entire legs and arms, shoulder blades, muscles and nerves were removed to be transplanted to other subjects.

The excision and transplants of organs of movement resulted in general deformity but more particularly in crippling skin scars, cicatrisation of muscles, and the prolapsing of the injured nerves, prolonged suppurative infections of bone tissue, and mal-positioning

\textsuperscript{134} Ibid., p.136. \\
of individual joints, all of which limited the victims’ ability to move and caused various other disturbances such as neuroses and mental illness. Most of the victims became invalid; for others their ability to work or lead an active life was permanently impaired.

Spitz in describing some of the shocking procedures carried out on helpless victims quotes Dr Maczka, a prisoner assigned as the x-ray technician in Ravensbrück concentration camp who testified for the prosecution at the Nuremberg Medical Trials:

On the operating table, the bones of the lower part of both legs were broken into several pieces with a hammer...The muscle experiments consisted of many operations always on the same spot, the upper or lower part of the leg. At each further operation larger and larger pieces of muscles were cut out. Once a small piece of bone was planted into a muscle...During nerve operations parts of nerves were removed.\textsuperscript{136}

Dr Maczka also stated that:

… amputations of the whole leg (at the hip joint) were carried out, or on others, amputation of the whole arm (with the shoulder blade)... Afterwards the victims (if they still lived) were killed by means of Evipan injections and the leg or arm was taken to Hohenlychen.\textsuperscript{137}

\textsuperscript{136} V. Spitz, \textit{Doctors from Hell}, op. cit., p. 117.
\textsuperscript{137} ibid., p. 118.


**Sepsis and Other Vaccine Experiments – Appendix XII**

Between December 1941 and February 1945, experiments were carried out to test the effectiveness of vaccines against typhus, smallpox, cholera and other diseases. According to the summary of the German Medical War Crimes and entries in Dr Ding’s diary (Ding was appointed Director of a research station at Buchenwald Concentration Camp), 729 concentration-camp inmates were experimented on with typhus, at least 154 of whom died.¹³⁸ These figures do not include the number of additional subjects who were artificially infected with the virus for the sole purpose of providing a ready supply of ‘sick’ blood with which to infect the experimental subjects.

**Incendiary Bomb Experiments**

Incendiary bomb experiments were purportedly carried out for the benefit of the armed forces and the civilian population. In these experiments, a mixture of phosphorus and rubber was applied to the skin and ignited. After twenty seconds, the fire was extinguished with water. After three days, the burn was treated with Echinacea in liquid form. After two weeks the wound had healed.

**Tuberculosis Experiments – The Bullenhuser Damm Children**

One of the most heinous and pointless experiments was conducted at Neuengamme Concentration Camp in late 1944 and concentrated on tuberculosis. The experiment involved 20 children aged from 5 to 12 years and ironically mirrored an experiment

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carried out in Lübeck in 1930 in which 73 of 251 infants died from contamination of the tuberculosis vaccination BCG. The BCG vaccine was at the time the most important and effective method known for the prevention of the disease. Conducted by Dr Heissmeyer for ‘the benefits of progress in medicine’, these experiments involved making a skin-deep incision in either arm and rubbing tubercular bacilli cultures into the wounds. This procedure was repeated several times during which time the children suffered very high temperatures and swelling of the arm and auxiliary glands. After a further period the lymphatic nodes of each child were removed and sent to Berlin where technicians bred new cultures of the tubercular bacilli, made an emulsion and returned the mixture. Each child was then injected with a vaccine from his or her own lymphatic nodes. Again, the children suffered increasingly high temperatures, enlarged lymph glands and serious lung changes with one child dying directly from the experiments. No discernible scientific discoveries were made and the children were eventually murdered by hanging.

The forensic authority Dr Otto Prokop comments on Heissmeyer’s experiments on TB as follows:

One characteristic feature of Heissmeyer’s experiment is his extraordinary lack of concern; add to this his gross and total ignorance in the field of immunology, in particular bacteriology. He did not then, nor does he now, possess the necessary expertise demanded of a specialist in TB diseases…He does not know any modern bacteriology textbook. He was also not familiar with work

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10. The twenty children of Bullenhuser Damm showing the incisions regarding the removal of the lymphatic nodes
methods in bacteriology…according to his own admission Heissmeyer was not concerned about curing the prisoners who were at his disposal. Nor did he believe that his experiments would produce therapeutic results.\textsuperscript{140}

In the children’s barrack there were caged guinea pigs, one for each child. The children and the animals each were assigned the same number. Whenever Heissmeyer came to test the children he would also inject the guinea pigs with the same infiltrates. Heissmeyer would later testify in court that for him there was no difference between guinea pigs and Jewish children.\textsuperscript{141}

\textbf{Hypothermia Experiments}

The hypothermia or freezing experiments are arguably the most controversial of the Nazi medical experiments. While callously wasting an unnecessarily large number of lives and having been conducted with such a degree of brutality as to epitomise what is morally wrong and evil, the actual data generated by these experiments is the most cited and used, not only by individual researchers but by governments. Although the results have been dismissed by authors such as Robert Berger who argues their ‘scientific integrity is so severely compromised’ as to make them unuseable, some scientists and researchers


\textsuperscript{141} G. Schwarberg, \textit{Murders at Bullenhuser Damm}, op. cit., p. 27.
believe them to be scientifically reliable.\textsuperscript{142} Major Leo Alexander, the medical consultant to the prosecution at the Nuremberg Medical Trials, maintained that the main data and the final report, written by the senior physiologists Holzlöhner, Rascher and Finke, satisfied ‘all the criteria of objective and accurate observation and interpretation’.\textsuperscript{143} In the conclusion of a 68-page CIOS (Combined Intelligence Operative Sub-committee) report Alexander stated:

\begin{quote}
The method of rapid and intensive re-warming in a hot water bath of 45°C (40° - 50°) of people in shock from exposure to cold, especially in water, should be immediately adopted as the treatment of choice by the Air–Sea Rescue Services of the United States Armed Forces.\textsuperscript{144}
\end{quote}

The actual experiments were conducted from August 1942 to mid 1943 at the request of the German Air Force. The survival rate of German pilots whose planes had crashed into the cold northern seas was very poor and it had become a matter of urgency to find a method of rescuing and saving them. Experiments were conducted using ice water and freezing cold dry conditions to simulate the specific war-zone conditions. According to Alexander, the first experiments on human beings carried out at Dachau involved submerging the subjects in water ranging from 2.5°C to 12°C.\textsuperscript{145} The subjects were

\begin{itemize}
\item \textsuperscript{142} R.L. Berger, ‘Nazi Science’, op. cit., p. 129.
\item \textsuperscript{143} U. Schmidt, Justice at Nuremberg: Leo Alexander and the Nazi Doctors’ Trial, NY, Palgrave Macmillan, 2006, p. 108.
\item \textsuperscript{144} L. Alexander, The Treatment of Shock from Prolonged Exposure to Cold, Especially in Water, Report, CIOS, Item No. 24, File No. XXVI-37, 1945, p. 68.
\item \textsuperscript{145} L. Alexander, The Treatment of Shock, op. cit., p. 23.
\end{itemize}
dressed in flying uniforms and wore life jackets. In one series of experiments the neck and occiput were submerged while in another series they were allowed to protrude above the water. Fatalities occurred only among the groups in which the body was immersed such that the water covered the back of the head thus affecting the brain stem and hind brain.\textsuperscript{146} Taylor’s opening statement for the prosecution at the Medical Trials refers to Alexander’s report on the experiments:

If the experimental subject were placed in the water under narcosis, one observed a certain arousing effect. The subject began to groan and made some defensive movements. In a few cases, a state of excitation developed. This was especially severe in the cooling of the head and neck…the defensive movements ceased after about 5 minutes. There followed a progressive rigor, which developed especially strong in the arm musculature; the arms were strongly flexed and pressed to the body. The rigor increased with the continuation of the cooling, now and then interrupted by tonic-clonic twitching. With still more marked sinking of the body temperature, it suddenly ceased. These cases ended fatally, without any successful results from resuscitation efforts.\textsuperscript{147}

\textsuperscript{146}ibid.  
Similar experiments were carried out at Auschwitz at much colder temperatures. As quoted in Alexander’s report, Rascher gave the following account of these experiments to Himmler:

Up to the present I have carried out intense chilling experiments in 30 human beings by leaving them outdoors naked from 9 – 14 hours thereby reducing their body temperature to 27° - 29°. After an interval which was supposed to correspond with a period of transport lasting one hour, I have placed these experimental subjects into a hot bath. In all experiments up to the present, all subjects, despite the fact that hands and feet were partly frozen white, were successfully re-warmed within another hour…no fatalities occurred as a result of this extraordinarily rapid method of re-warming.\(^{148}\)

**Other Experiments**

In addition experiments, no less ethical or monstrous were carried out in the name of military and national security. Experiments with poisons, administered by mouth and in bullets were conducted at Sachsenhausen, Buchenwald and Dachau. These experiments were motivated by the fear of a Soviet offensive with poison or to find alternative means of mass murder, or both. Inmates were shot, to induce bleeding, and to test the effectiveness of the blood coagulant ‘Polygal’.\(^{149}\) In studies in the treatment of a serious infection called Phlegmone some of the most monstrous experiments were carried out at Dachau. These experiments involved the intravenous and

intramuscular injection of pus followed by attempts at chemotherapeutic treatment of the resulting infections. Over 800 inmates were involved in the study and subsequently developed septicaemia or massive multiple abscesses of the extremities. Ninety percent of the subjects died.\textsuperscript{150}

\textbf{Racially Motivated Experiments}

The mass sterilisation and euthanasia experiments performed in the name racial hygiene and anthropology have already been addressed in detail. However, further experiments, particularly the infamous twin and dwarf experiments and the collection of Jewish skeletons are prominent not only for their pursuit of the Nazi concept of racial purity of the German people but also for their cruelty and senselessness.

\textbf{Twin Experimentation and Dr Joseph Mengele}

Genetic studies were the cornerstone of racial hygiene which proposed that human behaviour, for example criminality or obedience, intelligence and health, was a result of genes. The studies on twins conducted to provide the scientific basis for this concept serve as a forceful example of the deterioration of medical ethics.\textsuperscript{151}

The name synonymous with these twin experiments and linking anthropology and medicine to race and genocide is Joseph Mengele. It is difficult to comprehend the

\textsuperscript{150} Report of the Atrocities Committed at the Dachau Concentration Camp, Vol. I, Yad Vashem Archives, JM/10046, p. 17

killing and suffering of millions of Jews, gypsies and Slavs; the sheer volume overtakes the imagination. It is only when confronted with the suffering and torment of relatively few that some degree of comprehension, if any, is possible. Such is the case with the crimes of Mengele and his obsession with the study of twins in connection to racial purity and the Aryanisation of the German *Volk*. According to Dr Miklós Nyiszli a Jewish doctor who was an assistant to Mengele,

> [the]great goal of all of this research was to increase the birth rate of ‘super humans’ who were destined to become the ‘master race’. More specifically this would in the future mean every German mother giving birth to twins.\(^{152}\)

Mengele was highly qualified with both a medical degree and a doctorate in Philosophy, having matriculated at the universities of Munich, Bonn, Vienna, and Frankfurt. He specialized in physical anthropology and genetics, eventually working under Professor Otmar von Verschuster at the Frankfurt University Institute of Hereditary Biology and Racial Hygiene.\(^{153}\) While Mengele was a deliberate killer who not only selected people for the gas chambers but who also personally beat, shot and lethally injected defenceless victims, it was from his work with twins, dwarves and people with deformities, such as hunchbacks, that he derived his notoriety. He believed that by studying twins he could unlock the secrets of human reproduction and multiple births\(^{154}\) in order to increase the German population, and was greatly influenced by his mentor Dr Verschuster who had insisted that:


What is absolutely needed is research on series of families and twins selected at random...with and...without hereditary defects...[to achieve] complete and reliable determination of hereditary influences... [and of] relations between disease, racial types and miscegenation.155

Mengele had the perfect laboratory with a ready supply of subjects over whose environment he had complete control and over whom he could exercise the power of life and death. Preliminary testing involved the precise measurement of the subject’s height, length and breadth of the head, nose, the hands and the feet, as well as a morphological, dental, laryngological, ocular and surgical examination.156 In many cases once the examinations were complete the twins or dwarves were killed by lethal injection so that an autopsy could be performed. According to Nyiszli:

These experiments were carried out under the pretence of medical research. The in vivo experiments - those conducted on the living organism - hardly exhaust the phenomena of twins from the perspective of research. They are relative. They reveal little. Therefore, the next and most important stage of research is the autopsy. Normal and pathologically developed organs must be compared. But to do so requires cadavers. Since the dissection of the cadavers and the analyses of the particular organs must be done simultaneously in the experimental barracks of the Auschwitz camp…These are unique medical cases of the death of two twins at the same moment.157

155 R.J. Lifton, op. cit., p. 335.
157 M. Nyiszli, I Was Doctor Mengele’s Assistant, op. cit., p. 42.
**Jewish Skeleton Collection**

Obsessed with the racial theory of Nazi ideology, Dr August Hirt, Professor of Anatomy at Strasbourg University, with the assistance of Drs Rudolf Brandt and Wolfram Sievers, wished to add to the already substantial collection of human parts at the University museum a collection dedicated to what would be the extinct Jewish race. The collection was also intended for use in anthropological studies demonstrating the superiority of the Nordic race. Prosecution Exhibit 175 is a report of correspondence by Hirt to Rudolf Brandt in which he states:

> We have a nearly complete collection of skulls of all races and peoples at our disposal. Only very few specimens of skulls of the Jewish race, however, are available with the result that it is impossible to arrive at precise conclusions from examining them. The war in the east (with Russia) now presents us with the opportunity to overcome this deficiency….The best practical method for obtaining and collecting this skull material could be handled by directing the Wehrmacht (army) to turn over alive all captured Jewish-Bolshevik Commissars to the Field Office… Following the subsequently induced death of the Jew, whose head should not be damaged, the delegate will separate the head from the body and will forward it to its proper point of destination in a hermetically sealed tin can, especially produced for this purpose and filled with a conserving fluid.\(^\text{158}\)

Cancer Research

Proctor argues that the story of science under German fascism is not, as conventional belief would have it, only one of suppression and survival of the inmates of the concentration camps. In the area of cancer research, Nazi scientists were following the scientific and ethical approach established in Germany throughout the previous decades. The studies conducted to link cancer with smoking and with exposure to asbestos did not involve murderous human experimentation and the results were later confirmed to be scientifically valid and significant. The motivation behind this research was based on German racial hygienists’ fear that the people’s genetic material would become corrupted through smoking, and that it would have adverse effects on the maternal organism and on the working capacity of the Volk. They termed the use of tobacco as an ‘epidemic’, a ‘plague,’ as ‘dry drunkenness,’ and as ‘lung masturbation’, while tobacco and alcohol abuse was considered ‘diseases of civilization’ and ‘relics of a liberal lifestyle’. 159

Despite this premise of ideological rhetoric, the research that the Nazis conducted into tobacco-related cancer epidemiology was, in fact, valuable as was the recognition that asbestos can cause lung cancer. 160 Following animal experimentation which demonstrated that the tar extracted from cigarette smoke could cause cancer, tobacco tars were distilled to identify carcinogenic components. 161 The results of this research were of the ‘highest’ statistical significance; a 1994 re-evaluation of the study showed that the probability that the results could have come about by chance was less than

160 ibid.
161 ibid.
one in ten million.\textsuperscript{162} Obviously German doctors and medical researchers at the time of the Nazis were not unaware of the importance of scientific method in producing creditable results.

\textbf{Conclusion}

The medical experiments carried out during the Nazi regime represent a low point in medical history. With no due care for the individual and a complete disregard for the Hippocratic Oath, doctors turned from carers and protectors into torturers and killers. In the name of science and the health and protection of the armed forces and the Volk, the Nazi doctors exploited human beings as nothing more than abstractions. How could one human being subject another to an experiment involving such high-pressure conditions that it burst the person’s lungs and led to subsequent death? How could a physician subject a person to being frozen to death, inject a child with typhoid, force a person to drink seawater bringing them to a state of madness and death, or amputate the body part of one person to determine if it could be transplanted to another? Paradoxically, this was not the work of madmen but in most cases the work of highly qualified and competent doctors in some of Germany’s leading medical and scientific institutions. The vast majority of the experiments were unscientific, all were unethical and all brought pain, suffering and humiliation; many resulted in death.

\textsuperscript{162} ibid., p. 338
Chapter 5

Nazi Medicine: To Use or Not to Use
A Literature Critique


Chapter 5: Nazi Medicine: To Use or Not to Use

A Literature Critique

Imagine that you are charged with building the edifice of human destiny, the ultimate aim of which is to bring people happiness, to give them peace and contentment at last, but in order to achieve this it is essential and unavoidable to torture just one little speck of creation, the same child beating her chest with her little fists, and imagine that this edifice has to be erected on her unexpiated tears. Would you agree to be the architect under these conditions? Tell me honestly.¹⁶³

Fyodor Dostoyevsky

Introduction

The problem with research on Nazi medicine, and indeed with all research on human experimental abuses, is that it is perpetrator oriented.\textsuperscript{164} The individual victims against whom the atrocities are committed become faceless statistics bearing evidence of a historical episode, their lives and personal consequences they suffered remain in historical oblivion.\textsuperscript{165} This has unfortunate consequences for the understanding of these atrocities and the post-war responses, as exemplified when comparing the testimonies of survivors such as Eva Mozes Kor in recalling her horrifying personal experience of Auschwitz and subsequent suffering, to the argument of Robert Pozos, a research scientist, in justifying why he used the Nazi data.

In both the literature and the oral history regarding the question of whether or not to use the data there is a battle between those who are driven by the principles of science and medical progress and those driven by morality and a code of ethics. How does one make the right choice when the choices are so repugnant? Do the scientific community and society in general perceive medical science as lying beyond ethics simply because it has a defining role in the preservation of life? According to scientist Bradford Hill, the ‘ethical obligation always and entirely outweighs the experimental’, but in order to negotiate these two equally important values, which often stand in juxtaposition, researchers need to comprehend their own moral and ethical


\textsuperscript{165} ibid., p. 249.
obligations, and to understand their evolution over time.\textsuperscript{166} David Rothman, Professor of History and Social Medicine at Columbia College of Physicians and Surgeons, maintains that many researchers, and even international health organizations, are ready to defend a utilitarian calculus and prepared to let the need for knowledge supersede rights, that is to take advantage of social misery for the sake of medical progress.\textsuperscript{167}

According to the literature, from the initial prosecution’s address by Taylor to subsequent writings by historians and Holocaust scholars including Katz, Freedman, Proctor, Caplan, Berger, Pasternak and others there is no question that the deeds of the Nazi doctors were heinous and grossly unethical and immoral. While there is very little argument that the experiments were unscientific and invalid, what haunts most investigators is that in dismissing the data, they could also be dismissing information that could save a life or contribute to the quality of life.

This analysis will examine the arguments and opinions of some of these commentators. To discuss everything written on this matter would exceed the scope of this dissertation. The intention is to first present the analysis of three authoritative figures in some detail: the report of Leo Alexander, a medical consultant for the prosecution at the Nuremberg Trials; Robert Berger, a medical and Holocaust scholar who argues that the study on hypothermia is scientific fraud and thus cannot be used; and Robert Pozos, one of several scientists and researchers who have used or cited

\textsuperscript{166} U. Schmidt, \textit{Justice at Nuremberg}, op. cit., p. 17.

Nazi data since World War Two and believe the study to be scientifically sound. In addition to their arguments, the thoughts of other authorities on the subject will be addressed, though in lesser detail. It is to be noted that emphasis has been placed on the hypothermia experiments because it is the data from these experiments which has been frequently and continually referenced since the end of World War II and which thus stands at the forefront of the controversy surrounding the use of Nazi research data.

Discussion

A critique of the literature on whether the data should be used should start at the beginning which arguably is the report by Leo Alexander, Consultant to the Secretary of War of the United States and Medical Expert of the Chief of Counsel for War Crimes at Nuremberg.

Alexander’s Report

Alexander’s 1945 report *The Treatment of Shock from Prolonged Exposure to Cold Especially in Water* is a comprehensive analysis of the experiments carried out to determine the most beneficial way to re-warm severely hypothermic subjects. The report can be considered pivotal to the question as to whether the data should be used for two reasons: Firstly, Alexander gives legitimacy to the use or reference to the data when he conceded that the investigation ‘appears to have settled the question of what
to do for people in shock from exposure to cold’.\textsuperscript{168} He concludes his report with the following enthusiastic sanction of the data:

The method of rapid and intensive re-warming in a hot water bath of 45°C (40°C - 50°C) of people in shock from exposure to cold, especially in water, should be immediately adopted as the treatment of choice by the Air-Sea Rescue Services of the United States Armed Forces. The victims should be undressed, immersed in this bath for 10 minutes, and rubbed dry with towels, and placed in heated blankets. If the body temperature does not then continue to rise, the hot water treatment should be repeated, until the curve of re-warming ascends uniformly by at least one degree every ten minutes. Collapsible bathing facilities for this purpose should be provided so as to be available even in small ships; the necessary hot water should be available on all engine driven craft. If large number of victims are rescued at once and overtax existing bathing facilities, hot water of 50°C - 60°C should be poured at intervals over those waiting for the definitive hot water treatment.\textsuperscript{169}

Secondly, the adoption of this technique by the US government, following Alexander’s recommendation based on the Nazi findings, gave license for the use and citation of further findings from similar studies. Not only did the US government use the data, they also recruited scientists, including Hermann Becker-Freysing, Konrad Schäfer and Siegfried Ruff, who had worked on the hypothermia experiments to conduct further aviation research after the war.

\textsuperscript{169} L. Alexander, \textit{The Treatment of Shock}, op. cit., p.68.
Although Alexander does refer to the possibility that the manner in which the experiments were carried out might amount to war crimes, it was the further investigation by the US navy into these findings, known as the ‘Naval Report’, that formally recognised that the life of the experimental subject was compromised.\textsuperscript{170}

While keen to embrace the practical recommendations resulting from the experiments at Dachau, the US government was acutely aware of the sensitivity of using the data that had been sourced by such means, and issued the statement:

\begin{quote}
This report is not intended to condone to any degree whatsoever the violations of the Oath of Hippocrates and the flouting of humanitarian principles which occurred during the courses of the researches described. It is believed that a moral responsibility exists to make available the information gained through the sacrifices of lives and sufferings of the prisoners who served as experimental results.\textsuperscript{171}
\end{quote}

The following anomalies apparent from Alexander’s report\textsuperscript{172} should have raised questions as to the creditability of the chief investigator, Sigmund Rascher, and thus the experiments:

\begin{enumerate}
\item The professional and personal reputation of Rascher was brought into question on more than one occasion. Alexander quotes Dr Wolfgang Lutz, a member of the original team under Professor G. Weltz, who carried out animal research into hypothermia: ‘after the withdrawal of Dr. Romberg from the experiments
\end{enumerate}

\begin{flushright}
\textsuperscript{170} U. Schmidt, op. cit., p. 109.  \\
\textsuperscript{171} U. Schmidt, \textit{Justice at Nuremberg}, op. cit., p. 109.  \\
\textsuperscript{172} L. Alexander, \textit{The Treatment of Shock}, op. cit.
\end{flushright}
there was less restraint against inflicting excessive suffering or avoiding large numbers of fatalities among the experimental subjects. According to Alexander, Lutz considered Rascher a ‘bad character’ for more than one reason, and claimed that he had a notoriously bad reputation.

2. Professor E. Holzlöhner, a physiologist from Kiel University, told Lutz that he had initially been against joining forces with Rascher, but that he had later rationalised that it was better for a real expert like himself to be involved than for the matter to rest completely in ‘uncontrolled hands’.

3. Rascher committed scientific fraud. Rascher concocted a compound he named ‘Polygal’, which he proceeded to ‘test’ on prisoners for its anti-infectious properties. The tests were performed by injecting pus from phlegmons into the legs of individuals who received daily injections of polygal, and of control subjects who received no such injections. The polygal preparation was investigated by Kurt Plötner, a colleague of Dr. Schilling, who was conducting malaria experiments and found the substance to be merely saline with a fluorescent colouring.

4. According to Alexander, ‘the authors do not give figures of the total number of experiments, nor comparative figures of their therapeutic trials’.

5. There is evidence of interference in the methodology of the experiments, for example when Himmler insisted upon the use of women as a warming agent

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173 ibid., p. 38.
174 ibid.
175 ibid., p. 40
177 ibid.
178 ibid.
for dry hypothermic victims. Alexander also refers to Himmler’s changing of the wording and meaning of one of Rascher’s sentences, whereby the original read: ‘the best experiences for rewarming were made by alternating baths in the manner of the Sauna baths’, which Himmler altered to: ‘the best experiences in rewarming were made with Sauna Baths’.179

6. In respect to the actual findings, there are significant discrepancies. For example, on page 52 of Alexander’s report ‘death occurred at body temperatures between 24.2°C and 25.7°C’. Yet on page 63, Alexander refers to Rascher’s statement that ‘with few exceptions, death takes place at a rectal temperature of 26°C to 27°C’.180

7. Referring to the low pressure experiments, Alexander notes:

It is interesting to learn…the low pressure experiments did cause fatalities, while the official report: ‘Versuche zur Rettung aus großen Höhen’ by Dr. Ruff, Dr. Rascher and Dr. Romberg, Berlin-Adlershof, 28th July 1942, states that no fatalities had occurred in these experiments.181

This is verified in a letter dated 13 April 1942, from Rascher’s wife to Brandt requesting permission to take colour photographs of the freshly autopsied subjects.182

Müller-Hill states that Rascher was a fraud maintaining:

The files of the Deutsche Forschungsgemeinschaft (DFG) indicate that the work he (Rascher) did in 1936-1938 while getting a stipend from

179 ibid., p. 30.
180 ibid.
181 ibid. p. 22.
182 L. Alexander, The Treatment of Shock, op. cit., p. 22
the DFG was a fake. He described a spectacular test for cancer that could not be reproduced. Under normal circumstances, such a person is barred from further research, and if he manages to go with research, his data would be looked upon with extreme suspicion.\textsuperscript{183}

Despite Rascher’s questionable reputation, discrepancies in the data, and the immoral and unethical nature of the experiments, Alexander was convinced that the scientific data rationalising the method of intensive rewarming of hypothermic victims was sound.\textsuperscript{184} The Naval Report which was an extension of Alexander’s report concluded that ‘upon appropriate evaluation, the information reported may contribute materially to present knowledge of physiology and through practical application may be the means of saving lives’.\textsuperscript{185}

Although Alexander subsequently reversed his position and concluded that the results were not dependable\textsuperscript{186}, the two reports together with the decision by the US government to recognise and use the data set the stage for our ethical debate.

\textit{Berger’s Criticism}

Robert Berger argues that thorough investigation into the methodology of the hypothermia experiments revealed such severe compromises to scientific integrity


\textsuperscript{184} U. Schmidt, \textit{Justice at Nuremberg}, op. cit., p. 108.

\textsuperscript{185} ibid. p. 109.

that the results were unusable.\(^{187}\) Berger came to this conclusion based on the following:

1. One major finding was that the neck and the occiput had to be protected to minimize the effects of hypothermia. Although Berger admits that ‘the scalp is an efficient heat exchanging surface’, he points out that the lethal influence assigned to cooling of the neck and head by the Dachau researchers has not been confirmed by extensive experience with hypothermia during the last 45 years.\(^{188}\) Berger refers to Gagge and Harrington’s 1947 study *Physiological effects of heat and cold* in which they maintain that no ‘convincing explanation of the extraordinary quantitative effect of the cooling of the neck and occiput is available. It is probable that the effect is qualitatively real and conceivable that the disparity was quantitatively exaggerated for the benefit of Himmler’.\(^{189}\)

2. Another major finding was that rapid rewarming was effective. However, Berger questions that ‘since the DSR (Dachau Scientific Report) fails to furnish survival statistics, how can one judge the effectiveness of rapid or any other rewarming therapy.’\(^{190}\) This lack of reliable data is already evident from Alexander’s report ‘unfortunately, the authors do not give figures of the total number of experiments, nor comparative figures of their therapeutic trials.’\(^{191}\)


\(^{188}\) ibid., p. 117.

\(^{189}\) ibid.

\(^{190}\) ibid., p. 118.

3. The unreliability and inconsistency of the data was nowhere more apparent than when analysing the temperature at which the victims died. In the report by Rascher, the victims died when temperatures fell to between 25.7°C and 29.2°C. However in an intermediate report Rascher reported that all victims died upon the temperature reaching 28°C. In a postscript to the DSR the lethal temperature was stated by Rascher as being ‘with few exceptions between 26°C and 27°C.’\textsuperscript{192} The claim that there was an increase in cerebral oedema in the hypothermic victims is also disputed by Berger as follows: ‘the cerebral oedema...was either pure fabrication or may have been produced by causes other than hypothermia, that is from shock or brain injury due to beating or to struggle during cooling.’\textsuperscript{193}

Berger argues that ‘on analysis the Dachau hypothermia study has all the ingredients of a scientific fraud, and rejection of the data on purely scientific grounds is inevitable. They cannot advance science or save human lives.’\textsuperscript{194}

\textbf{Robert Pozos}

The scientist Robert Pozos, a specialist in hypothermia, has made use of and cited the Nazi hypothermia research data. From three articles authored or co-authored by Pozos it emerges that:

1. He relies on the work of Andrew Ivy, a consultant physiologist and expert witness for the prosecution on scientific and ethical subjects who evaluated

\textsuperscript{192} R.L. Berger, ‘Nazi Science’, op. cit., p. 118
\textsuperscript{193} ibid., p. 120.
\textsuperscript{194} ibid., p. 97.
the data for the Nuremberg Trials. In his initial report questioning whether the
criminal medical experiments were of any real scientific value, Ivy had
determined that they were not.\textsuperscript{195} However, Pozos appears to place more
emphasis on Ivy’s statement in 1947 ‘that some of the data were obviously
good’ and on his written claim from 1954 that the Nazi studies had ‘some very
worthwhile results’.\textsuperscript{196} It can be argued that Pozos seems to ignore Ivy’s other
findings, namely:

Some of the men who worked in these laboratories were well trained
scientists and others were untrained pseudo-scientists. None were
motivated by the spirit of the true scientist, namely, to seek truth for the
good of humanity…the German scientists had become immoral and
dishonest, therefore their achievements were of a pseudo-scientific
character…the greatest of all medical tragedies was further magnified
by the fact that the experiments performed added nothing of
significance to medical knowledge.\textsuperscript{197}

2. Pozos does acknowledge that ‘since the experiments cannot be repeated, the
data can never be considered accurate’; secondly ‘a number of questions have
been raised concerning the methodology of the experiments, such as the
number of subjects, the statistical methods, the use of controls, and so forth.’
(Pozos, 1992, p. 102) These are the same questions raised by Berger.


\textsuperscript{197} Quoted in A. Mitscherlich and F. Mielke, \textit{Doctors of Infamy}, op. cit., p. xii.
3. In an article co-authored with Jay Katz\textsuperscript{198}, Pozos concedes that if judgment on validity is based on the project as a whole, Berger’s conclusion that ‘the Dachau hypothermia study has all the ingredients of a scientific fraud, and rejection of the data on purely scientific grounds is inevitable, has merit.

4. Yet, despite acknowledging that methodology and resulting data are suspect, Pozos provides a scientifically based rationalization for the use of the data. He argues the following conclusions\textsuperscript{199} may be made:

- There was a rationale for the experiments.
- The experiments were conducted by trained scientists who had experience in the area of science and temperature regulation.
- The data was presented to various scientific audiences in Nazi Germany.
- The information has been referenced by scientists since World War II who are knowledgeable in this area; and
- No one has scientifically debunked the major findings.

5. Pozos quotes from a letter he received from Hoenig, Professor of Physiology at the University of Rochester, in 1988:

> The quality and heuristic value of research on human subjects depends on the ethical as well as the technical qualification of the investigators and on the ethical principles set by society. Conditions in a concentration camp preclude science as we understand it. Indeed


\textsuperscript{199} R. Pozos, ‘Scientific Enquiry and Ethics: The Dachau Data’, op.cit, 102.
experiments conducted anywhere within an amoral society are suspect.\textsuperscript{200}

Pozos respects the noble sentiment and high ideals suggested by this statement but considers it erroneous, arguing that bad science and bad ethics do not go hand-in-hand, and that unethically conducted research may be scientifically sound.\textsuperscript{201}

6. Finally, Pozos acknowledges that the experiments Rascher did without the collaboration of other scientists have been shown to be fraudulent.\textsuperscript{202}

There appear to be contradictions in Pozos’ argument for the use of the data in that he simultaneously acknowledges major flaws in the methodology yet accepts the experiments’ results. In reference to Berger’s claim that the application of cold to the occiput and dorsal neck accelerates cooling was \textit{probably} fabricated, \textsuperscript{203} Pozos claims this finding has not been sufficiently investigated to permit a definite conclusion one way or the other. He argues, however, that even if all the rest of the Dachau data were fraudulent and only this one fact proved not to be, one could argue that the Dachau experiments constitute a historical model for the study of unethically derived data.\textsuperscript{204}

\begin{itemize}
\item \textsuperscript{201} ibid.
\item \textsuperscript{202} R. Pozos, Scientific Enquiry and Ethics: The Dachau Data, op.cit, 102.
\item \textsuperscript{203} R. Pozos and J. Katz, ‘The Dachau Hypothermia Study’, op. cit., p. 137.
\item \textsuperscript{204} ibid., p. 136.
\end{itemize}
In regard to ethics, Pozos argues that data is neither evil nor good but exists independently of the methods by which it was gathered, and that ethics and science are not linked. He proposes that from a purely scientific point of view, if one believes the data to be accurate, it is appropriate to use it and that under such circumstances the collection of the data is of greater value than the individuals from whom it was gathered. Certainly, he appears to see no relation between how the data is collected and documented and the social and moral context in which the data is developed and put to use, and exempts the scientist of any ethical responsibility regarding misconduct in the past.

Paul Weindling in his book *Nazi Medicine and the Nuremberg Trials* (2004) explores the diverse views held in Britain immediately after the Holocaust as to the worthiness of the experiments and the usefulness of the data to the advancement of medical science. Weindling refers to medical journals such as *The Lancet*, which raised the dilemma of using the data in 1946, foreseeing the clash between scientific exploitation and duty to the patient.205 *War Crimes News Digest* reported on the controversy in the British medical world about the preservation or destruction of the notes made by German doctors concerning experiments on prisoners’.206 The *Daily Telegraph* quoted Dr Layton, who took over the Belsen Hospital in 1945, as saying: ‘whatever one may think about the useful knowledge to humanity coming from these experiments, it would be quite wrong to use such knowledge’.207 In contrast, the editor of the *British Medical Journal* (BMJ), along with the entomologist Kenneth Mellanby, was of the opinion that the dedicated German scientists had been unfairly

206 ibid.
207 ibid.
hauled before a military tribunal and endorsed the latter’s mission to collect Nazi research findings remarking that ‘if any good can come out of these experiments they should be published’. Weindling refers further to Mellanby in his praise of the notorious paper (Über die Schutzwirkung verschiedener Fleckfieberimpfstoffe beim Menschen und dem Fleckfieberverlauf nach Schutzimpfung 1943) on typhus vaccines published by SS medical officer Edwin Ding in the Zeitschrift für Hygiene in 1943. According to Mellanby this was an ‘important and unique piece of medical research’ that ‘formed the basis not only of German, but also of British and Allied anti-typhus policy.

In contrast Weindling refers to the evaluation report by Ronald Hare, one of eight British experts who had been involved in epidemic control and military research or eugenics, in which:

[he] criticized [the] unjustified use of human subjects, as well as the methods, competence and training of Ding, Hoven and Schiedlausky, and the brutality of Dietzsch, the convict in charge of the typhus wards. Hare considered specimens may have been contaminated by latent viruses and bacteria of other diseases, and that Ding had falsified data, and made valueless tests with toxic pharmaceuticals…Hare found Haagen’s typhus vaccine research reckless in persisting with research inducing a strong reaction and in causing at least 50 deaths.

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\begin{align*}
\text{208} & \text{ ibid.} \\
\text{209} & \text{ ibid.} \\
\text{210} & \text{ P. Weindling, } \text{Nazi Medicine and the Nuremberg Trials, op. cit., p. 319} \\
\text{211} & \text{ ibid., 322.}
\end{align*}
\]
The messages coming from prominent physicians and scholars were mixed. Weindling suggests that this led to a laissez-faire attitude towards scientific research in the late 1940s and 1950s and provides the example of Cambridge Professor of Experimental Medicine, Robert McCance, who in 1946 approached German doctors for information on blood and urine tests to use in treating terminally sick babies with meningoceles or other abnormalities.\textsuperscript{212} Being unsure whether the tests were safe, McCance selected terminally ill babies but failed to obtain parental permission claiming that elite researchers should have the trust of colleagues and patients, and that a consent form would destroy the whole atmosphere of beneficent trust.\textsuperscript{213} Here a leading British medical researcher was willing to use Nazi research and to dismiss patient consent for a procedure that may have put the lives of the children in further danger.

Weindling also describes a rise of defence-related and experimental research. According to his analysis, Western Allies faced the paradoxical choice between exploiting the Nazi medical research in a time of mounting tension with the Soviet Union or pursuing justice against the perpetrators of evil within the Nazi medical profession.\textsuperscript{214}

According to Weindling, the Nuremberg prosecutors depicted the medical atrocities less as scientific abuses ‘violating any established principles of medical ethics’ \textsuperscript{215} than as the products of a depraved political system. He suggests that while the initial purpose of the Trials was clearly to prosecute the offenders rather than draw lessons

\textsuperscript{212} ibid., 340.
\textsuperscript{213} ibid.
\textsuperscript{215} P. Weindling, ‘From Medical War Crimes to Compensation’, op. cit., p. 172.
on how research agendas could become inhumane, with the growing body of evidence provided by the victims, the Trials became both an instrument of punishment and the catalyst for the aggressive implementation of a medical code of ethics.\textsuperscript{216}

In 1989 Arthur Caplan organized a conference at the University of Minnesota aimed at exploring a number of issues related to his field of medical bioethics but, specifically, how the actions of the Nazi Doctors had been grounded in moral language and ethical justification. Following this conference, he collated a series of essays by victims of the Nazi experiments, Holocaust historians, ethicists, and theologians who had contributed to the debate in his publication \textit{When Medicine Went Mad}.

In one of these essays, ‘Nazi Experiments as Viewed by a Survivor of Mengele’s Experiments’, Eva Moses Kor, a twin and a victim of the experiments by Dr Josef Mengele, voices her clear disapproval at the use of the data:

\begin{quote}
I am appalled by anyone who seemingly is justifying the means by using the results of the Nazi experiments. In Auschwitz we were treated like a commodity; the hair was used for mattresses…the gold collected from the teeth of the dead went into the treasury, and many of us were used as guinea pigs. Today some doctors want to use the only thing left by these victims. They are like vultures waiting for the corpses to cool so they could devour every consumable part.\textsuperscript{217}
\end{quote}

\begin{flushright}
\textsuperscript{216}ibid.
\end{flushright}
Another survivor, Sara Seilor Vigorito, felt that modern-day scientists availing themselves of this data were showing a similar disregard for the victims as the original perpetrators:

[T]he scientist who reuses these data aligns himself with the values and methods of the Nazi scientists/doctors by extending their work into contemporary research, whereby giving it credibility and sanction. He too is saying first and foremost, ‘for the sake of science’ and for the sake of ‘progress,’ ignoring the case for humanity…[S]cience and medicine are designed to exist for the benefit of humankind, but they can only maintain this dignity and respectability when they are the ‘servant’ of human life and well being. 218

One of the most interesting and provocative essays in Caplan’s collation is Velvl Greene’s seemingly frank exposé of his beliefs. 219 Greene is a Jew who accepts the discipline of the Torah in his personal life and claims to be a ‘vicarious’ Holocaust survivor. As a researcher in the biomedical sciences who can identify with anyone wanting to advance his own studies, Greene refers to Halakhic literature on medical research to present a case for the use of the data. Regarding ethics, he unashamedly claims that, had he known about Doctors of Infamy by Mitscherlich and Mielke, ‘I have no doubt, now, … I would have cited the Nazi data, looked for more, and used

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them in the work I was doing,” and confesses, ‘I don’t think any moral argument would have dissuaded me then.’ He asks the very valid question ‘Are we [scientists] seriously being told to sublimate our curiosity?’ and elaborates:

It is hard to explain to the layman, even to the philosopher, how the motives and methodology of applied research generate a kind of scientific morality in which the greatest good is a ‘breakthrough’.

Greene refers to the struggle of the research scientist who might occasionally be rewarded by uncovering tiny bits of valuable information but whose hard work for the most part produces results of no immediate importance. Like Pozos, he questions whether it is ‘fair to deliberately ignore previous work that might help in this struggle’. Greene poses some very confronting questions on ethics and morality which leave the reader reassessing his/her own convictions:

Ask the doctoral candidate whose dissertation research on syphilis could be shortened by a year or even six months if she would use the data from the Tuskegee Study. Ask the young assistant professor whose career depends on publications whether he would deny himself access to the excellent pellagra data obtained from the inmates of Southern prisons and poor farms, the excellent immunization data obtained by aerosolizing live viruses in

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220 V. Greene, ‘Can Scientists Use Information Derived from the Concentration Camps?’, op. cit., p. 158.
221 ibid., p. 159.
222 ibid., p. 158
223 ibid., p. 159
Russian classrooms, or the excellent hepatitis data obtained by deliberately infecting retarded children in New York.\textsuperscript{224}

Greene refers to Halakhic law in his argument on ethics in medical research claiming that the most important principle of Jewish Medical Ethics pertaining to the use of Nazi medical data is that of \textit{Pikuach Nefesh} or saving a human life, and that the physician acting as a healer is considered to be a special agent and partner of the Almighty\textsuperscript{225}. He states:

\begin{quote}
A physician engaged in Pikuach Nefesh is obligated to desecrate the Sabbath, to transgress the immutable dietary laws, to force-feed a patient on Yom Kippur, to break the laws of confidentiality, even to lie to the patient - as long as in his professional opinion the action will contribute toward the saving of a human life.\textsuperscript{226}
\end{quote}

However, Greene expresses doubt as to whether this rabbinic ruling would apply to the use, for example, of the data from the hypothermia experiments, claiming that while the doctor as described above is dealing with a life or death situation that is happening in the present, Pozos’ case involves doubtful and delayed benefits for future patients who are as yet unknown. Such research is in itself not sufficient reason to risk ‘desecration of a martyr’s memory or justification of a murderer’.\textsuperscript{227} In the above cases Greene is speaking as a Jew on behalf of Jewish physicians and medical

\textsuperscript{224} ibid.  
\textsuperscript{225} V. Greene, ‘Can Scientists Use Information Derived from the Concentration Camps?’, op. cit., p. 165.  
\textsuperscript{226} ibid.  
\textsuperscript{227} ibid.
researchers and does not address the question of morality or ethics separately for others.

Whereas other scholars, philosophers and scientists present a single line of argument as to the scientific or moral justification of using the data, Greene challenges the reader on a number of fronts by alluding to a collective human responsibility;

[T]he issue is not one of semantics or medical ethics or scientific reliability.

It is not a question of tainted, immoral, and illegal data. It is rather tainted, immoral, and illegal humans who did the work – people very much like us.

Irrespective of whether the data is used or not, Greene argues that the Holocaust and the Nazi experiments should be put ‘under the floodlights’ and on ‘centre stage’ and that instead of banning it:

[The Nazi data] should be exhumed, printed, and disseminated to every medical school in the world along with the methodology and the names of the doctors who did it, [and] whether or not they were indicted, acquitted, or hanged.

In the same publication, Pozos, Berger and Greene address the dilemma of using the data along more scientific lines, while ethicist Benjamin Freedman, in his essay

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228 ibid., p. 169.
229 V. Greene, ‘Can Scientists Use Information Derived from the Concentration Camps?’, op. cit., p. 169.
‘Moral Analysis and the Use of Nazi Experimental Results’, focuses on the question’s ethical and emotional significance. He proposes that physicians and scientists using the data may be following their own moral commitment, that despite misgivings, and despite acknowledging the heinous acts committed, they are, in fact, working within the confines of the Hippocratic Oath for the health and welfare of their patients. Faced with a dilemma of choosing between their own or the communities’ moral standards and preserving life and health, they choose the latter.

Freedman illustrates the dilemma with an anecdote: The scion of the Soloveichik rabbinic dynasty was upbraided by his students for having permitted violation of the Sabbath on behalf of a mildly ill Jew. He defended his decision as by no means taking the laws of the Sabbath lightly but rather as taking the conflicting duties of Pikuach Nefesh, preserving life and health, very seriously. Pozos in his writings on the matter professes facing that very moral dilemma but concludes it is more important to use some of the data for the sake of sufferers of hypothermia. Dr John Hayward of the University of Victoria in British Columbia, who has also used the Nazi data on hypothermia (Appendix XIII) stated:

I don’t want to use this data, but there is no other and will be no other in an ethical world. I rationalise it a little bit. But to not use it would be equally

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231 ibid.
bad. I’m trying to make something constructive out of it. I use it with my guard up, but it’s useful. 232

Freedman questions whether the use of the data means the prolongation of the Nazi project and whether it perpetuates the evil or even adds to it by keeping it alive. 233 While he acknowledges that the small increment gained by scientists might appear to trivialize the monstrous acts of the Nazi doctor, he argues that the Holocaust already exhausts the ethical ability to imagine evil. 234 Instead, he believes the current scientific and medical use of the data is not an extension of the Nazi project:

[T]he use causally depends on the project; the project has perished, the remaining detritus has been coopted for another purpose, one that is quite antithetical to the intentions of the Nazis. 235

As a philosopher and ethicist, Freedman understands ethical evaluation as it is attached to human actions, not to objects or their mathematical representations. He examines the belief that using the data has redemptive values or the proposition that some good is salvaged from the ashes but rejects it asking:

[I]s the wrong diminished, diminishable, in any way whatsoever, because of good that is mined from it afterward and… were the lives of those sacrificed, those korbanot, in some need of redemption, so that their lives

234 ibid.
235 ibid.
and deaths become infused with significance because of what this has meant
to others following them?\textsuperscript{236}

In his monograph \textit{Inhuman Research. Medical Experiments in German Concentration Camps}, Alfred Pasternak confesses that ‘the horror of the camps is part of my personal history’\textsuperscript{237} and argues that regardless of the possible benefits to mankind, the results of the Nazi experiments should be condemned to oblivion. Pasternak not only provides a brief yet comprehensive account of the vast number of experiments which took place, he also refers to primary communication documents between Nazi doctors, scientists and their superiors which provide proof of the experiments and mindset of the perpetrators. In discussing the issue of ethics and Nazi research Pasternak quotes scientists, scholars, Holocaust historians, ethicists and survivors but admits to bias in his analysis of their writings.

He appears to concentrate on those who argue that there is no scientific basis or justification in using or referencing the data, such as Dr Jay Katz who suggested that after publishing the details of the experimentation to prove their existence, he would ‘condemn the data to oblivion’.\textsuperscript{238} Katz states in a separate article ‘Abuse for the Sake of Science’\textsuperscript{239} in \textit{When Medicine Went Mad} that the reason for not using the data is because ‘their use may dehumanise us as conducting the experiments did the Nazi physicians.’\textsuperscript{240} Pasternak also quotes Brigadier General Telford Taylor as stating that

\begin{thebibliography}{9}
\bibitem{236} ibid., p. 147
\bibitem{237} A. Pasternak, \textit{Inhuman Research}, op. cit., p. 299.
\bibitem{238} ibid., p. 312.
\bibitem{240} ibid., p. 266.
\end{thebibliography}
the Nazi experiments were inadequate and unscientific, and that they ‘revealed nothing which civilised medicine can use’.  

He refers to Professor Allan Buchanan of the University of Arizona who believes that bad ethics and bad science are inextricably linked, and that ‘since the Nazi experiments were unethical, they were, by equation, scientifically invalid’.  

He quotes Dr Howard Spiro of Yale University insisting that ‘no one honours the memory of the dead victims by learning from experiments carried out on them. Instead, Spiro argues we make the Nazis retroactive partners in the victims’ torture and death’.

Further references are made to the theories and thoughts of such eminent persons as Arnold Relman, editor of the New England Journal of Medicine who claimed that the Nazi experiments were ‘such a gross violation of human standards’ that they were ‘not to be trusted at all’, Doctor Leonard Hoenig, Professor of Medicine, who categorised the experiments as ‘pseudo-science’ since the Nazis blurred the distinction between science and sadism; Immanuel Jakobovitz, Chief Rabbi of the British Commonwealth of Nations, who said that using the Nazi data offered not a shred of meaning to the 6,000,000 deaths.

Where Pasternak does refer to arguments suggesting the data could in some way be used, he quotes a strong criticism of them, such as Hoenig’s response to the work of Kristine Moe:

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241 Pasternak, op. cit., p. 299.
242 ibid. p.312
243 ibid., p.313.
244 ibid., p.313.
245 A. Pasternak, Inhuman Research, op. cit., p. 312.
246 ibid. p.313.
I sincerely hope that medical students and physicians alike will join with me in rejecting Moe’s very mistaken conclusions…These atrocities deserve no worthy mention in our medical literature.\textsuperscript{247}

Kristine Moe’s article ‘Should the Nazi Research Data be Cited?’ in The Hastings Center Report (1984) attracted considerable attention from a number of scholars and physicians. Moe concludes the article by stating that ‘we cannot imply any approval of the methods. Nor however, should we let the inhumanity of the experiments blind us to the possibility that some good may be salvaged from the stakes.’\textsuperscript{248} She maintains that use of the data is justified under certain conditions, namely, if the data is proven to be reliable, unavailable from any other source and capable of contributing to the greater good and providing publication is accompanied by a clear condemnation of the means by which it was collected.\textsuperscript{249} In her article, Moe examines whether to cite or not to cite this data with reference to the work of John Hayward of the University of Victoria in British Columbia (Appendix XIII), who uses the Nazi measurements of the rate of body cooling in cold water, and that of Robert Harnett of Louisiana Technical University, who uses the hypothermia data to corroborate more reliable experimental results and case reports of accidental hypothermia.\textsuperscript{250} Both Hayward and Harnett use the Nazi data selectively, the latter admitting that it is weak. Further, Moe refers to those who reject the data, such as Arnold Relman and the philosopher Allen Buchanan of the University of Arizona. According to Buchanan:

\textsuperscript{247} Hoenig quoted in A. Pastemak, Inhuman Research, op. cit., p. 317.
\textsuperscript{248} K. Moe, ‘Should the Nazi Research Data Be Cited?’, op. cit., p. 7.
\textsuperscript{249} ibid.
\textsuperscript{250} K. Moe, ‘Should the Nazi Research Data Be Cited?’, op. cit., p. 6.
I found that in the vast majority of cases [review of five years’ work on human subjects, by the Review Committee at the University of Minnesota], the experiments that are ethically unsound are also scientifically unsound. Very rarely have I seen an experiment that is very good and valuable that has serious ethical problems.²⁵¹

Moe also refers to the late Henry Beecher, Dorr Professor of Research in Anaesthesia at Harvard University, who argued in a classic article ‘Ethics and Clinical Research’ (NEJM, 1966) that information obtained in an unethical manner should not be published lest there be ‘an odor of hypocrisy’ attributable to medicine.

In response to this article, The Hasting Center Report²⁵² published the following two readers’ letters under the heading ‘Nazi Research: Too Evil to Cite’:

Leonard J. Hoenig Professor of Medicine University of South Florida wrote:

I do not believe that we can, in good conscience, cite data that were acquired through the brutal killing and torture of innocent persons. To do so would, in my opinion, lend a measure of undeserved dignity to these wicked studies and at the same time insult the memory of the victims by seeming to justify their murder.²⁵³

²⁵¹ Buchanan quoted in K. Moe, op. cit., p. 6.
²⁵² The Hasting Centre Report, Vol. 15, No. 4, August 1985, pp. 31-32.
Howard M. Spiro, M.D. Yale University School of Medicine wrote:

We need to express our revulsion at some activities even if that revulsion means losing something irreplaceable. I cannot agree that we honour the memory of the dead by ‘learning’ from experiments carried out on their bodies. We make them retrospective guinea pigs by a strained utilitarian argument.\(^{254}\)

According to George Annas and Michael Grodin the consensus of opinion is that research data obtained unethically should not be published.\(^{255}\) They refer to various medical organisations such as the International Committee of Medical Journal Editors (ICMJE), known as the ‘Vancouver Group’ which was formed in 1979, and the Council of Biology Editors, which endorse ethical practice in scientific research. On the subject of unethical research on human subjects, the Council of Biology Editors states that: ‘Editors can and should play their part in upholding ethical standards by refusing to publish reports of work that violates human rights, even if the work seems scientifically valid and important’.\(^{256}\)

Baruch Cohen provides a brief analysis of both the experiments and the arguments for and against the use of their results. He argues that

when the wickedness of the experiment has been very great, then only a colossally important objective can justify its use. Those that wish to use the data have to satisfy the burden of proof, which becomes greater in proportion to the wickedness of the experiment. It is easy to see the futility

\(^{254}\) Spiro in *The Hasting Centre* Report, op. cit., p. 31.
\(^{256}\) ibid., p. 282.
of advocating the data’s use when the intended benefit to society is trivial and moderate. Conversely, if the intended benefit is to save lives, most would agree that the data should be used.\textsuperscript{257}

Cohen is scathing in his criticism of the Environmental Protection Agency (EPA) in the United States for its ruling against using Nazi data from the research on ‘phosgene’ when the agency was commissioned to analyse how different doses of phosgene affected the lungs. EPA scientists voiced their concern that the recorded data was flawed based on the fact that Bickenbach’s report failed to note how the pulmonary oedema was measured, and did not specify the victims’ sex or weight.\textsuperscript{258} Cohen felt that:

The Nazi data could be critical to saving known victim’s lives. If anything, Thomas’ (head of EPA) decision to reject using the Nazi data when human lives are in jeopardy was at the least ‘stupid’.\textsuperscript{259}


\textsuperscript{258} B.C. Cohen, ‘The Ethics of Using medical Data from Nazi Experiments’, op. cit.

\textsuperscript{259} ibid.
Conclusion

The arguments of these eminent commentators do not produce a definitive answer as to whether the data should be used or cited or not. All agree that the experiments were unethical and resulted in harm and in many cases death, and the vast majority agree that the methodology was unscientific. From the early statements of Ivy, Taylor and Lord Moran and the later arguments by Beecher, Berger, Katz and Freedman to more contemporary writings by Pasternak, there are convincing arguments that from an ethical and scientific point of view the data should not be used. These commentators all refer, to some extent, to the criminality of the research, its consequences of suffering and death, the incompetency and fraudulent actions of the researcher, the violation of the medical code of ethics existent in Germany at the time, and the impact on the honour and reputation of medicine today if the data is used. Berger provides a thorough analysis of Alexander’s report, demonstrating the unreliability of the data and questioning the competency of the scientists, particularly Rascher. Even the researchers who have used this data, such as Pozos, Haywood and others, are unable to rebut Berger’s analysis on the basis of any scientific investigations. Instead, they seem to have isolated small bits of data they believe to be valid while admitting, as Pozos did with the hypothermia experiments, that the experiments as a whole were, indeed, flawed.
Chapter 6
Nazi Medicine: To Use or Not to Use
A Contemporary Response


15. Algorithm illustrating ethical analysis
Chapter 6: Nazi Data: To Use or Not to Use?

A Contemporary Response

If a terminally ill patient repeatedly asks a nurse or doctor for assistance in dying, what response best exemplifies the virtues of a health care professional? There seems to be no answer to this question, short of an enquiry into whether it is right or wrong to help a patient in such circumstances. But in that case we seem bound, in the end, to come back to discussing such issues as whether it is right to follow moral rules or principles, or to do what will have the best consequences.²⁶⁰

At the beginning of this paper emphasis was placed on the complex relationship between science and ethics when the medical community is confronted with questions of right or wrong and life or death. The complexity of the relationship was evident from the literary critique and is reinforced by this oral study.

The oral study is an important second phase of this research in that it gives insight into present-day views of members of the medical and scientific communities regarding a complex and challenging aspect of medical ethics.

The Meaning of Ethics

Before examining the respondents’ actual responses, a brief discussion on the types of ethical theory and how they apply to the responses to the questionnaire is needed. According to Beauchamp and Childress ethics is a generic term for various ways of understanding and examining moral life. While some approaches to ethics are normative, that is they present standards of right or good action, others are descriptive, that is they report what people believe and how they act. There are two particular ethical theories that can be applied to the dilemma facing the participants in the oral study - utilitarianism and deontology. Utilitarianism is a consequence-based theory in which actions are deemed right or wrong according to the balance of their good and bad consequences, while deontological theory is obligation or duty-based.

262 ibid.
According to Dr T, a bio-ethicist and academic and participant in the oral study:

The action described in the first part of the question (Question 1) brings to mind a utilitarian perspective. Put briefly, the decision to use data derived from Nazi medical experiments is ethical provided that the benefits or gains of using the results outweigh the harms or human costs associated with the collection of these data. While the decision to prohibit the use of these data is based on a deontological perspective. We have duties and obligations to the victims of research that supersede the maximising utility of data obtained by unethical means. Each of these perspectives embodies distinctive ways of looking at and responding to ethical issues.263

Thus Pozos, Hayward and Alexander (initially), who used or recommended the use of the data, would argue that the potential benefits outweighed the cost of lives lost. Of course they were also motivated to use the data since experiments such as these could never be duplicated, but their overriding reason was to save lives. On the other hand, those who according to the literary analysis rejected use of the data were driven by a code of ethics that was based on duty towards both the victims and the integrity of science. These same ethical bases are evident in the responses from the oral study.

263 Dr T, written response received December 2007.
General Observations

Before proceeding to a more detailed review of the oral history, the following observations can be made:

1. All participants acknowledged the unethical and heinous nature of the experiments.

2. There was overwhelming condemnation of unethical scientific practices which was highlighted by the responses to the comparison of the Nazi experiments and the Tuskegee experiments carried out in the USA. The reaction to the Tuskegee experiments and other similarly unethical experiments carried out in more recent times was severe and left no doubt that these medical professionals wanted to distance themselves from such unethical practices.

3. In all cases where the use of the data was advocated, scientific validity was deemed to be essential. However the fact that none of the experiments could be duplicated without the loss of life automatically brings one to the conclusion the experiments were unscientific. The hypothermia experiments are such an example. In such cases the temperatures at which a person died cannot be repeated and confirmed. Specific questions cannot be answered. For example are the temperatures at death correct? Does body mass matter? What period of submersion will kill a person?

4. In respect to those who supported the use of the data, the potential to save a life or improve the quality of life was paramount. They used non-
emotive, objective language to emphasise the benefits derived and rationalise their adherence to the utilitarian theory of ethics.

5. Those who propounded the non-use of the data used more emotive language with emphasis on the honour and dignity of scientific research. They particularly stressed the need to honour the victims. Even were the experiments judged to be scientifically sound, some respondents, all Jews, would condemn the use of the data. They were outraged by the experiments and felt it their duty to protect the honour of the victims by rejecting the results in any form.

6. Despite acknowledging it, the majority of those who favoured the use of the data did not take the heinous and unethical nature of the experiments into consideration in coming to their decision. This was highlighted in the responses to the Bullenhuser Damm children and their ultimate fate.\textsuperscript{264} Overall the arguments were based on the present and the future as opposed to the past.

7. The majority of female respondents advocated the use of the data.

8. Among the Jewish responses approval and disapproval were divided equally.

9. Evident from all the responses is that ethics plays an essential role in the professional life of the researcher and clinical practitioner. Despite the acknowledgement of the role of ethics, very little attention was given to

\textsuperscript{264} From November 1944, twenty children between the age of 5 and 12 were used as human guinea pigs in a series of experiments to determine whether the children had any natural immunity to tuberculosis. The children’s lymph glands were removed for analysis, and living tuberculosis bacteria were injected into their veins and directly into their lungs. All of the children became very sick with one child dying as a direct result of the experiment. The remaining 19 children were hanged.
the subject of consent by the victims, the cornerstone of medical ethics. The participants in the oral history and for that matter in the work of the historians and scholars did not seem to consider consent or lack of consent a major determinant in assessing the use or non-use of the data. It appears in most experiments consent was not obtained or if it was it was given under coercion or by way of false promises. The mere fact consent was not given provides the strongest case for the experiments to be considered unethical and thus the results unusable.

10. All respondents except one were aware of either the Nuremberg Code of Ethics or the Helsinki Act of 1952 or both. All acknowledged the essential place of ethics in medical research and clinical practice.

Discussion

The case for use of the data

The rationalisation for the use of the data was largely based on two arguments: benefits versus costs and paying homage to the dead, both under the proviso that use of the data would not encourage further unethical research.

Physician Dr B explains:

while on the surface perverse, if data currently exists that has been garnered from Nazi research, then I believe the potential value of this to current
patient management may, in certain circumstances, outweigh the moral
concerns.\textsuperscript{265}

Dr I, a bio-ethicist, argues along similar lines setting two conditions:

(a) the benefits must significantly outweigh the costs; and (b) a deterrent
factor must be included to prevent those seeking to ‘break ground’ from
doing unethical research.\textsuperscript{266}

Dr E, a scientist, felt that using the data would be paying homage to the victims:

I do not believe it to be morally or ethically wrong in the name of the
victims to use the data…it is better to pay homage to the victims by using
the data to the good of others rather than bury it and not put it to good
use…I believe there is a fundamental imperative to help our fellow man,
even in the face of tragedy…this is maximizing benefit to mankind from
tragedy.\textsuperscript{267}

In addressing the impact of using the data on science, Dr E acknowledges the
unethical practices of Nazi medicine but suggests that science and ethics can be
separated:

The deeds have been done, nothing can change that fact, but basically some
good can come from evil. Scientific reputation now rests on what we do
with the data, not how it was obtained. If data can be reliably assessed and

\textsuperscript{265} Dr B, written response received August 2007.
\textsuperscript{266} Dr I, written response received September 2007.
\textsuperscript{267} Dr E, written response received September 2007.
used for good, then I believe that scientific reputation can be established. Indeed not to use the data would call scientific credibility into question.\textsuperscript{268}

Dr O, a physician, academic and medical researcher, expressed a similar view:

It was an ethical outrage that such experiments took place. However, the fact that they did is now a matter of history. If the information gained can save future lives or improve the human condition, then the information should be able to be used.\textsuperscript{269}

Dr D, another scientist argues that:

… it is more relevant to use available data to improve or save human lives provided that in doing so there is no risk that it could encourage further unethical research.\textsuperscript{270}

Dr L, an academic and philosopher arguing for the use of the data, highlights the complexity of the dilemma facing the medical professional. He believes there is no simple answer to such a question and that it really depends on the consequences that could follow if such data is used.\textsuperscript{271} According to L, one of the determining factors is whether ‘there is evidence that the use of the data will be used to justify similar research procedures in the future’.\textsuperscript{272} If so, use of the data would be unacceptable. If,

\textsuperscript{268} ibid.
\textsuperscript{269} Dr O, written response received September 2007.
\textsuperscript{270} Dr D, written response received August 2007.
\textsuperscript{271} Dr L, written response received October 2007.
\textsuperscript{272} ibid.
on the other hand, there were a guarantee that it would not be misused to justify similar research procedures, use of the data could be acceptable on the basis of saving or improving lives. On meeting this criterion, she presents two further considerations to the use of the data regarding potential further suffering of participants and the suffering of families of those lost to such experiments.\textsuperscript{273} If there is the potential for suffering,

\ldots the answer will be less clear, \ldots Here we will need to balance between:

(a) the interest of those whose life could be improved or saved by treatment resulting from research making use of morally problematic data, and (b) the interests of those who already suffered from the SS doctor’s immorality and have an interest in the rejection of such data in current and future research.\textsuperscript{274}

The cardiologist Dr A draws an analogy to murder, stating that from every crime, particularly murder, there are ‘lessons to be learned’.\textsuperscript{275} From each murder he contends:

society should learn in order to prevent further murders occurring. So when I viewed all of these questions and when I looked at the cases, I saw them in the same light, namely they were murders from which we all needed to learn. It’s rather clichéd to say someone ‘died in vain’, but in many ways the memorial to a person who has died at the hands of another is the realization by others of a means of preventing that occurring again. I found

\textsuperscript{273} ibid.  
\textsuperscript{274} ibid.  
\textsuperscript{275} Dr A, written response received August 2007.
the accounts of the experiments very disturbing but if they were collected scientifically, however horrific they were, I feel that the data could be used in the same way as we learn from every murder in society…I think that the data if valid should be used to save the life of another following on from the argument that I have expressed.276

The response from Dr T embodies the complexity of the arguments. He examines the case for and against the use of the data in considerable detail stating:

I agree with the basic line of reasoning that the scientific validity of the findings is not sufficient moral justification of itself to make the use of such data ethically acceptable … [yet] there may be priorities other than protecting the memory of victims and the reputation of science that we need to take into account that mitigate against complete prohibition.277

He comments on the impact of relative and absolute prohibition citing two examples of the former: the Pernkopf Atlas and Cancer research, both of which have been widely used, cited and, according to Dr T applied for therapeutic purposes. He suggests that those advocating prohibition might argue that this ‘critical, relativising stance offers no resolution of this ethical dilemma nor helps us to make ‘better’ decisions’.278 They would argue that only complete prohibition on the use of the data, denying its legitimacy, would be acceptable. An example of partial use of the data occurs in the case of work carried out by Haywood and Pozos: while acknowledging that the experiments were flawed, they used data which suited their needs. By doing

276 Dr A, August 2007.
277 Dr T, December 2007.
278 Ibid.
so, it can be argued, they gave the hypothermia experiments a degree of legitimacy while at the same time clouding the real issue of allowing an ethical response.

Dr T is interested not only in the scientific status of Nazi medicine. He wants to know and feels it to be particularly important that medical researchers know ‘Why unethical research?’ He wants these researchers ‘to be curious about who, what, where and when of destructive Nazi research.’ He contends that:

…absolute prohibition runs the risk of providing a new generation of medical researchers with the comfort of critical distance from unethical Nazi research and suffering. Prohibition can serve to insulate researchers from criticism, by allowing them to imagine that there is no affinity between their own research enterprise and Nazi research practices.279

This line of reasoning is similar to that of Greene who argues ‘I submit that we must put the Holocaust and the Nazi experiments directly under the floodlights and on centre stage even if some of us and our past and present are partly illuminated by the glare.’280 Greene suggests that instead of banning or prohibiting the Nazi data it should be part of the curriculum of every medical school in the world. Dr T argues there is an obligation within the scientific community to offer researchers and scholars the chance to bear witness to the suffering of those who were the victims of ‘unregulated’ science.281

279 Dr T, December 2007.
280 V. Greene, ‘Can Scientists Use Information Derived from the Concentration Camps?’, op. cit., p. 169.
281 Dr T, December 2007.
Dr T acknowledges that the recent history of medical research is made up of a long list of unethical projects including, for example, the Tuskegee study. He contends ‘the Nazi medical data may serve as a warning and a lesson of what can happen when researchers objectify and materialize the value of human subjects of their research’. 282

**Condemning the use of the data**

Those rejecting the data used emotive language and felt that whether the experiments were scientifically sound and, if so, whether the data could add to humanity was not an issue. The responses were emphatic in stating that there was a duty towards the victims and towards the integrity of science and medical research to condemn the experiments and reject the data. With the exception of one respondent, those rejecting the use of the data were Jewish, the majority living and working in Israel which might indicate a direct or indirect involvement with persons who suffered during the Holocaust.

Dr F, a physician and medical researcher, explains:

> In my opinion, in the names of the victims, and for the sake of remembrance, nobody should use, cite, mention or quote any of the results/materials/conclusions etc. of any infamous Nazi experiments. Any use of these findings will commemorate these monsters in a more favourable way, which is unthinkable. These data can be mentioned, naturally, when one is dealing with the Nazi ‘doctors’ atrocities in

282 ibid.
historical perspectives. Any so-called scientific findings which were achieved by illegal/unethical methods (on human beings or on animals) should be condemned and erased from any real scientific journal/lectures/books at once.\textsuperscript{283}

Following along similar lines Dr G, another physician and medical research specialist, argues:

There is no doubt in my mind that the latter – the non-use of the data on moral and ethical grounds in the name of the victims and also for the reputation of scientific research – is far more relevant. Although the data exists and one cannot change the past – one can certainly demonstrate disgust and disapproval of the revolting way and the non-scientific methods [in which] the data were initially achieved. Such display and expression of rejection provides a clear measure of future potential situations that may allow performing experiments of this repulsive and immoral character. By using this data for further scientific research and for the saving of a human life, one actually demonstrates his own immoral values and provides some form of justification of such acts.\textsuperscript{284}

Drs H, J, and S, all of whom are medical researchers, agree that the non-use of the data on moral and ethical grounds in the name of the victims and also for the reputation of scientific research is more relevant.\textsuperscript{285} Dr U states clearly that ‘the reputation of scientific research is far more relevant than the use of data which was

\textsuperscript{283} Dr F, written response received September 2007.
\textsuperscript{284} Dr G, written response received August 2007.
\textsuperscript{285} Written responses received August – September 2007.
tainted with the blood of innocent people’. Dr K warns that ‘if the knowledge gained is used, it gives some creditability to the processes’, while Dr W says, ‘the use or citation of the data which was obtained by unethical means would be an insult to the participants. In my opinion it would legitimize the medical experiments’.

**Are bad science and bad ethics inextricably linked?**

Regarding the question of whether bad science and bad ethics are inextricably linked, the vast majority of respondents argued that they were not, although all acknowledged that they could be and clearly were in the case of the Nazi medical experiments. It is universally accepted that the Nazi experiments were unethical despite the fact that German medicine had a code of ethics. The *Reichsrundschreiben 1931*, which set out clear guidelines for medical practice, including the issue of consent, justification for the experiment, the well-being of the patient, prohibition of experiments with dying persons, and prohibition of experiments with children if it endangered lives, were all disregarded when the Nazis took power. Since it is also generally agreed that they were unscientific and flawed, in isolation the Nazi experiments would seem to indicate that bad science and bad ethics are inextricably linked. Quoting Dr C: ‘bad ethics and bad science is the psychopathic world of the ‘murderous quacks’.

However, the vast majority of respondents argued that bad science and bad ethics were not linked as such.

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286 Dr U, written response received October 2007.
287 Dr K, written response received October 2007.
288 Dr W, written response received October 2007.
289 Dr C, written response received August 2007.
Dr A suggests that bad ethics and bad science are not always linked explaining ‘you can have very good ethics and propose a totally appalling protocol with the study really being meaningless in the scientific world.’ The vast majority of responses echoed this view with comments such as Dr J’s ‘I can think of plenty of papers I review when the science is bad and it has ethics approval’,\(^{290}\) or Dr P’s ‘some very good science has been produced by unethical experiments’.\(^{291}\)

**Is there any comparison between the Nazi experiments and the Tuskegee experiments?**

The Tuskegee study of syphilis began in 1932 in the United States and was to last 42 years. The study involved 399 poor, uneducated African Americans who had untreated syphilis. The study was unique in that these men were ‘not’ to be treated even when a cure, penicillin, became available. The study was undertaken because the United States Public Health Service (USPHS) believed that a study ‘in nature’ of syphilis was necessary because physicians needed to know its natural sequence of symptoms and final outcomes in order to recognise key changes during its course. After investigations by US Federal authorities it was found that 28 of the original syphilitic group died of the disease and 41 wives and 19 children had evidence of syphilis.

All respondents condemned the Tuskegee experiments with varying degrees of intensity. There are many similarities between the Nazi experiments and this research carried out from the early 1930s to the early 1970s in the United States. Dr T argues

\(^{290}\) Dr J, written response received August 2007.

\(^{291}\) Dr P, written response received September 2007.
that both sets of researches ‘were situated within a complex ecological matrix of relations of power, expectation and demand.’\textsuperscript{292} He compares the two as follows:

1. Both sets of studies selected, exploited and abused a population of human subjects who were socially, culturally and politically marginalized, placing them outside any rules that offer the human subjects protection.

2. Both studies took place within a state where racial ideologies enjoyed wide-spread public and professional support and great political salience.
   Both sets of studies bore evidence of the practical use of science being put to work for the purpose of racial hygiene.

3. Both sets of researchers raised ethical issues of accountability and appeared to place their research goals over other values, such as the physical and psychological welfare of the subjects.

4. Along the lines of lack of accountability, both sets of researchers showed extreme detachment, dissociation and lack of compassion for the suffering, needs and interests of the subjects. In both cases effective treatment was deliberately withheld on the grounds of the value of the subject and/or the cost of providing treatment.

5. Both studies demonstrate that the public could rely neither on the conscience of the scientists nor peer control, to police and regulate their practice, in order to prevent tragedy.

6. Both American and Nazi researchers expressed surprise that anyone should question their morality and their position of superiority given that they were ‘men of science and medicine’.\textsuperscript{293}

\textsuperscript{292}Dr T, December 2007.
According to Dr T, the use of the data from the Tuskegee experiments must be questioned both ethically and on scientific grounds and that ‘researchers and ethicists have a responsibility to be open to the possibility that Nazi crimes of science may be reproduced in any society or culture at any time.’

Dr A likens the Tuskegee experiments to murder, saying that

in this particular study the neglect by the investigators with regard to stopping the study when treatment became available led to 28 of the original group dying of syphilis. I see no difference here between the murder the Nazis committed and the murder these investigators committed.

Dr D sees the US case as very disturbing because the scientists could have stopped the experiments or could have provided medication when penicillin was introduced onto the market. They did not and the experiments lasted far too long.

Dr L laments about the fact the Tuskegee experiment was allowed to happen within a democratically legitimate regime – something the Nazi regime never was. While this is true, in the United States of the 1930s the American Negro did not share the rights of the Caucasian and was considered sub-human by many.
A less intense view was provided by Dr G, who argued there was a basic difference between the two experiments. The Nazi ones were planned from the beginning to use healthy humans and expose them to a life-threatening situation ‘for the sake of science’.  

In the Tuskegee experiments the subjects were stressed; they were not inoculated with the bacteria. Although they were economically and socially deprived, the Tuskegee subjects were still different from the Nazi subjects who were tortured and killed in the name of science.

Dr E takes a far harder line in maintaining that, on the scale of bad ethics, the Tuskegee experiments fall even lower than the Nazi experiments. According to E, while the researchers in the Tuskegee experiments received consent, the fact that it was uninformed consent made it ethically as bad. He argues that in the Nazi experiments only those experimented on were affected (this would be disputed by the relatives of those who lost loved ones), whereas in the Tuskegee experiments the failure to inform the subjects that they had syphilis or to treat the infection led to further infection of others (women and children) not participating in the trial. Dr E maintains that ‘similar to the Nazi experiments, death was viewed as an acceptable (even desirable) endpoint in the Tuskegee study with 28 men dying of the disease and a further 100 of syphilis-related complications’.

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298 Dr G, August 2007.
299 Ibid.
300 Dr E, September 2007.
301 Dr E, September 2007.
The Children of Bullenhuser Damm – if the experiments had been scientifically sound, should the data be used despite the fate of the children?

Once again the respondents voiced their outrage at the experiments and in this case the fate of the children. However, the majority believed that had the experimental data been garnered from sound scientific methods, they would advocate the use of that data. Quoting Dr C whose views reflected those of the majority:

... this is painful, but again, if it can be shown to have scientific validity and if in turn lives can be saved – we owe it to these poor children that their deaths should not have been in vain.\(^{302}\)

Similarly, Dr U explains that

... if such data were available, I would use it, with a heavy heart and great reluctance. I would be unable to shake off a sense of conflict and pain within myself – I would feel ashamed, horrified and greatly troubled. At the same time, to ignore the results is to make further invisible the victims and their suffering.\(^{303}\)

However, those who condemned the use of the Nazi data in general expressed similar views regarding this question. The following response by Dr G is representative of their feelings:

\(^{302}\) Dr C, August 2007.
\(^{303}\) Dr U, October 2007.
… of course their fate should influence the decision to use the data – that’s
the main issue. It is unethical enough to experiment anything on human
beings…if it is not tested before as safe and approved in a common way
by a dedicated committee of professionals – it is unethical and should be
condemned. Let alone the mere torture, suffering and eventual death of
children!! (It seems almost unethical to ask such a question…)\textsuperscript{304}

\textbf{Science and ethics}

Does the degree of suffering of the subjects determine the level of acceptance of the
data irrespective of the ethics or morality of the experiments? In other words can
science be separated from ethics? Every medical practitioner is aware of the
Hippocratic Oath. Are you aware of the Nuremberg Medical Code of Ethics and the
Act of Helsinki? And in your practice and role as a researcher does ethics, as applied
to medicine and caring, play a significant role?

The final questions of the study examine the relationship between science and ethics
and the role, if any, that ethics play in medical research. In respect to the question as
to whether there is a relationship between suffering and acceptance of the data Dr O’s
comments were representative of most respondents’ views: ‘many contemporary
studies involve treatment with therapeutic agents with unpleasant side effects or high
risk of mortality. Provided these studies are ethical, we accept them readily’.\textsuperscript{305} By

\textsuperscript{304} Dr G, August 2007.
\textsuperscript{305} Dr O, September 2007.
this he does not infer that suffering of the patient is irrelevant and that only the outcome matters, instead, as U insists, suffering does matter.\textsuperscript{306} However, U maintains that ‘separating science from ethics removes the obligation to consider means as well as ends. Boundaries are more easily crossed in the absence of ethical requirements’\textsuperscript{307}

In respect to the question whether science and ethics can be separated, the overwhelming response was that it could not and more importantly, should not.

Dr G explains his personal feelings:

\ldots when it comes to human beings, any experimentation, including just asking them questions, needs to be performed in an ethical manner. The human life in all aspects is to me sacred and is not to be played or fooled around with. As doctors we have sworn the Hippocratic Oath – and that’s why in war we treat and take care of the wounded enemy soldiers, as much as it is difficult to do. One cannot involve his own feelings and has to stick to ethics if he wants to act properly and in an acceptable civilized manner or to do science as it should be done.\textsuperscript{308}

The relevance of ethics in medical research is reflected in the participants’ awareness of either the Nuremberg Code of Ethics and the Helsinki Act of 1952 or both. However, while the majority of them were aware of the codes, they were not versed in the specific conditions of the code and made fleeting reference to the requirement of

\textsuperscript{306} Dr U, October 2007.  
\textsuperscript{307} ibid.  
\textsuperscript{308} Dr G, August 2007.
‘consent of subjects’ and ‘doing no harm’. On the other hand, all participants professed to a very strong commitment to a code of ethics both in research and clinical practice. The following are some responses which reflect the sentiment and commitment of the group:

Dr G: In my practice, due to regulations, a study cannot be performed without the approval of our local ethics committee. This includes any study – it could be anything from a retrospective one collecting data from patients’ files…to any type of intervention.\(^{309}\)

Dr E: In my current role I supervise the clinical team and approve the overall objectives, regulatory submissions and strategy. All clinical trials are regulated and are conducted according to the Declaration of Helsinki and are reviewed by an independent ethics committee.\(^{310}\)

Dr A: Certainly in my practice as a researcher, every project that we do has ethical approval even when it’s the most minor adjustment to a therapy when we may get the Chairman’s consent without a formal submission. If there is any reasonable doubt in anybody’s mind we go through the full ethical procedures. Patients have to give informed written consent and have a detailed written document about the project they are joining. They are free to answer as many questions as possible and free to leave the study at any time if they become uncomfortable.\(^{311}\)

\(^{309}\) ibid.
\(^{310}\) Dr E, September 2007.
\(^{311}\) Dr A, August 2007.
Dr M: Every piece of research that I or my colleagues does must be authorized by the human ethics committee at our university. I regard this as insurance and assurance that my research meets current ethical standards…I am very aware that ethical standards change over time…because I currently work in some areas regarded as ‘sensitive’ and with populations who are sometimes characterized as vulnerable or marginal, discussions of ethics form part of the day to day research process. 

From the responses it emerges that the respondents feel a sense of security that the work and outcomes are being monitored by independent bodies, whether they be international, national or local authorities. They appear to welcome controls and ethical guidelines that will assure them that, if followed, their work will be acknowledged as sound science and the results accepted.

Conclusion

The oral study demonstrates that ethics does play a pivotal role in modern day medical research and clinical practice. What emerged is, firstly, that the majority of doctors are aware of the various codes of ethics that regulate their profession, and that for all the respondents medical ethics are considered crucial in their professional life. Further, all participants condemned the Nazi medical experiments as unethical and heinous, and all agreed that if the scientific process was not sound its results could not be used.

312 Dr M, September 2007.
However, despite this consensus, there is a wide disagreement in relation to the use of data obtained from unethical practices such as the Nazi experiments. When it could be used to save a life, the vast majority said they would use the data, despite the fact that the experiments were unethical, cruel and sometimes murderous. It was felt that the commitment to save a life was paramount, and that nothing could change the fact that the experiments had already occurred. Thus, if they were scientifically sound and the data was considered useful to improving or saving life, the findings should be used. Use of such data, especially of the Nazi experiments, was also justified as a means of honouring the memory of those who died and suffered by giving purpose to their deaths – the saving of others’ lives.

While a minority argued for absolute prohibition regarding the use of data gained by unethical means, it was also felt that this might, in fact, risk ‘providing a new generation of medical researchers with the comfort of critical distance from unethical Nazi research and suffering’. 313 At a time when medical research particularly in the area of social engineering is advancing at a rapid rate, the need for awareness of and adherence to ethical due process is of vital importance. It would seem that cognisance of past atrocities committed in the name of ‘science’ might well serve to prevent present and future researchers from becoming party to unethical practices as a result of human failure and frailty.

313 Dr T, December 2007
Chapter 7: Conclusion


17. Cover *Classic Cases in Medical Ethics* (2004) Gregory E. Pence
Chapter 7: Conclusion

... the genetic makeup of a sperm cell changed, reordered...to order, actually...for hair and eye color, statue, potency...I imagine...hairiness, features, health...and mind. Most important...Mind. All imbalances will be corrected, sifted out...propensity for various diseases will be gone, longevity assured. We will have a race of men...test-tube-bred...incubator-born...superb and sublime.\(^{314}\)

Edward Albee

The beginning of this dissertation aimed at examining contemporary society’s view of the dilemma of whether or not to use Nazi medical data. In order to fully understand the contemporary responses, an overview was presented of the actual experiments and the context in which they took place, as well as a survey of past views documented in the relevant literature.

According to the history of and major influences in German medicine from the mid nineteenth century to Hitler’s rise to power, it can be concluded that while German racial hygiene and the cleansing of the German Volk was not officially instituted before 1933, these concepts had already achieved considerable ground support in medical and philosophical circles, and the wider society. The Nazi government’s manipulation of the German medical profession, coupled with the co-optation of scientific practices, population genetic theory and disease models\textsuperscript{315} led to sterilization, euthanasia, medical experiments and the Final Solution, all of which required the active and passive participation of all spheres of the medical profession – doctors, researchers, nurses, medical and scientific academics and health administrators.

The literature critique examined the arguments for and against the use of the data. By sheer number, the number of researchers who have used and or cited the data (it is estimated the research data on the hypothermia experiments have been cited on approximately 45 occasions) and scholars and historians who have advocated its use or citation would indicate that the data should be used. However, it is not about numbers. There were well founded arguments against using the data because of the unethical and heinous nature of the experiments (Katz, 1992; Layton, 1946; Kor, 1992; Pasternak, 2006), but especially for the lack of scientific validity of the experiments due not only to the unethical and cruel nature of the experiments, but to the unreliability of the data as a result of incompetence and the questionable reputation of the researchers (Berger, 1992; Ivy, 1946). By all standards of research

dating back to the first implementation of a code of ethics, ironically first formulated in Germany in 1900, the science was invalid, the data unreliable.

Thus, it is the conclusion of this study that there is no ethical dilemma; the data should not be used.

**Challenges and Solutions**

Following the research conducted into the views held by contemporary researchers and medical practitioners, there appears to be a paradox in that the majority deemed it acceptable to use the Nazi data while simultaneously condemning the ethical basis upon which that data was derived as wholly unacceptable. So while the doctors in the oral study admitted to being driven by a strict code of medical ethics, one and all abhorring the ethics of Nazi medical research, the majority of those same doctors condoned using their data to save a life. This paradox can be explained by the overarching impact of the Hippocratic Oath, whereby it is the doctor’s sworn duty to save a life whenever possible; this appears to be the case even when the data has been unethically produced.

However, if the Hippocratic Oath takes precedence over the Nuremberg Code of Ethics and the Act of Helsinki such that researchers are willing to use scientific and medical data that has been garnered by unethical means, then why have a code of ethics at all? The answer is twofold: Firstly, in order to protect the individual participant in any research, and secondly, to accept the nature of human beings and to counteract their potential to do great harm.
The dominant aim of the Nuremberg Code of Ethics and the Act of Helsinki was and is to protect the rights and well-being of research participants. In addition, these same codes act to place ethical limits on the research activities of doctors. The Nazi medical experiments show what can happen when such limits are not imposed and the well-being and human rights of the individual are deemed irrelevant in the pursuit of a greater cause. The actions of the Nazi medical community in fact threatened the very basis of ethical and moral society. As stated by Justice Jackson at the Nuremberg Trials:

... the wrongs which we seek to condemn and punish have been so calculated, so malignant, and so devastating, that civilization cannot tolerate their being ignored because it cannot survive their being repeated.316

Society has entered a new period of medical and scientific discovery with an emphasis on social engineering. Ethics should be at the forefront of this work to guide this journey science is taking, the destination of which is unknown. On 27th May, 2008 it was announced in the United States that the Howard Hughes Medical Institute, one of the world’s largest private philanthropies, was granting $US 600 million to fund ‘risky’ but potentially life-saving medical research by fifty-six of America’s top scientists. The institute ‘hopes it will make major discoveries in a variety of fields,
including genetics and biology’. What portion of the six hundred million dollars will be devoted to ensuring that the highest standard of ethics is followed?

Two areas of current medical research which demonstrate the vital role ethics should play are genetics and the intervention trials for reducing perinatal transmission of the Human Immunodeficiency Virus (HIV). With regard to genetics, certain differences in human phenotypes will be scientifically proven to be owing to different genotypes. Some of these genotypes will be seen as causing the physical or mental disablement of their carrier. When this theory is fully developed and information accessible, what will take precedence, the privacy and dignity of the carrier or scientific truth? In other words, an ethical dilemma will arise as to whether or not to make an individual’s health records available, for example to insurance companies, health funds or employers thereby disadvantaging the individual, threatening his/her livelihood, long-term health and prosperity.

Lurie and Wolfe argue that the HIV trials sponsored by the US and conducted in developing countries in Asia and sub-Saharan Africa in the 1990s, were mostly unethical and responsible for hundreds of preventable HIV infections in infants. In trials conducted in the US and France, the Aids Clinic Trials Group (ACTG) Study 076, pregnant women who were HIV-positive were treated with the antiretroviral drug zidovudine, initially orally and then intravenously during labour, a subsequent dose

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being administered to child on birth. The intervention reduced the incidence of HIV infection by two thirds. In fifteen of the sixteen similar trials undertaken in developing countries, however, many or none of the patients were provided with antiretrovirals.\textsuperscript{320} The drug was not made available to women in these countries due to the ‘prohibitive cost’. In the wake of ACTG 076 the World Health Organization (WHO) convened a meeting in 1994 to assess the agenda for research on perinatal HIV transmission. No ethicists were asked to join in the deliberations, and the meeting concluded that ‘Placebo-controlled trials offer the best option for a rapid and scientifically valid assessment of alternative antiretroviral drug regimes to prevent [perinatal transmission of HIV]’.\textsuperscript{321} While the WHO’s assessment cannot be scientifically faulted, their conclusion gave official approval of the fifteen studies conducted in Africa and Asia which ‘clearly violate recent guidelines designed specifically to address ethical issues pertaining to studies in developing countries’.\textsuperscript{322}

Thus, despite the Nuremberg Code of Ethics, the Helsinki Act and a plethora of additional codes of ethics at international, national and institutional levels, unethical practices in medical research still exist and have the potential to continue unabated. While ‘Human subjects in any part of the world should be protected by an irreducible set of ethical standards’\textsuperscript{323}, indeed, strict adherence to such set of ethical standards should have started at the conclusion of the Nuremberg Medical Trials. Instead, as demonstrated by the HIV trials, it appears that the world is able to tolerate the differentiation between levels of ethics depending on the ‘clientele’.

\textsuperscript{320} ibid.
\textsuperscript{321} ibid.
\textsuperscript{322} ibid.
The question that challenges the medical community, governments and the public who demand continual improvements in health and well being and expect regular discoveries of new life saving technologies, is how to meet these demands and still adhere to the highest standards of medical and scientific ethics. Time and money, both almost always in short supply, are factors that place limitations on today’s research programs. The scarcity of either or both can lead to shortcuts.

History has revealed that human beings are capable of the most heinous acts. This is evident in the actions of the Nazi doctors during the Holocaust particularly as well as in the actions of doctors in the Western world who carry out unethical medical experiments either in the name of science or for some spurious motive like greed, fame or career improvement. Attempts have been made through the Nuremberg Code of Ethics and the Act of Helsinki to provide researchers with clear guidelines. However, it is evident that these have been unknown or ignored. As a result unethical research continues.

The answers may lie in an approach from the ground up where the researcher must be educated in ethics and guided from the early days of his or her education. As Dr T\textsuperscript{324} and Greene\textsuperscript{325} argue, each medical student should be aware of the shameful history of medical research and past atrocities that took place in the name of medical science. Medical students should be made aware that the researchers in the Tuskegee project, for example, wrongly thought they were acting according to a code of ethics. Students should be made aware that in 1963, at the Jewish Chronic Disease Hospital, New

\textsuperscript{324} Dr T, Written response received December 2007.
\textsuperscript{325} V. Greene, ‘Can Scientists Use Information Derived from the Concentration Camps?’, op. cit.
York, twenty two chronically ill, debilitated non-cancer patients, without their consent, received intradermal injections of live human cancer cells. The experiments were carried out to determine if foreign cancer cells would live longer in debilitated non-cancer patients than in patients debilitated by cancer. Furthermore medical students should be aware of an AIDS protocol in Uganda in the late 1990s carried out by investigators from John Hopkins University, Columbia University and Makerere University, Kampala. Quoting from an article by David Rothman, Professor of Social Medicine at Columbia College of Physicians and Surgeons:

They studied 415 HIV–discordant couples in rural Uganda over 30 months, providing condoms and counseling to the couple; they would also, upon request, inform those tested for AIDS of the results. But they would not themselves divulge to the HIV–negative partner whether his or her spouse was HIV–positive. Nor would they provide AZT to the infected partner. Over the course of the research, ninety of the HIV–negative subjects converted to positive, with similar rates of male-to-female and male-to-female conversions. The most critical factor determining transmission was the amount of “viral load” the HIV–positive person was carrying.326

Secondly, ethic committees and boards should thoroughly police the projects that have been given approval, and for every grant that is awarded, a specific proportion should be allocated to the creation of a structure that ensures ethical prudence. Thirdly, under no circumstances should medical or scientific journals accept papers in which there is doubt about scientific method or reference is made to unethically derived data.

These measures are already in place to some degree however the challenges faced over the past thirty years and into the twenty first century will require a new and better understanding of the changing world. The effects of globalization have not only had economic ramifications but have manifested in dramatic social and health changes. Rich countries have grown in wealth while more than half of the world’s population lives in poverty – 25% in abject poverty. This has had a profound effect on health in these poor countries and poses the challenge of how to fight and arrest the escalating epidemic of sickness and death. In relation to the international profile of health a number of phenomena have developed. First, diseases such as AIDS, SARS and Bird Flu have become phenomena of globalisation. Second, there has been a change in the “disease profile” particularly in China and Asia where there has been an increase in Western type diseases such as cardiovascular disorders due to changes in diet and lifestyle and third there appears to be an ever increasing shift of medical and scientific research from first world to third world countries. The latter is occurring for three reasons: the exorbitant cost of carrying out research in developed countries; researchers are going where diseases of interest are more prevalent; and there are no or very loose codes of medical research ethics in these countries. AIDS research that was carried out in Uganda could not be carried out in the United States; the research protocol was deemed unethical. What appears to have happened is that research practice has overwhelmed ethics. The main premise of both the Nuremberg Code of Medical Ethics and the Declaration of Helsinki was that the well being of the individual must take precedence over the needs of science and the interest of society.

328 D. T. Rothman, Back to first Principles, op.cit. p. 284
However, considering the research in developing countries that has been undertaken by western countries and international pharmaceutical companies in recent decades it is apparently all too common for loopholes within the codes to be exploited to gain approval from host ethics committees.

Solomon Benatar, Professor of Medicine and Director of the University of Cape Town Bioethics Centre, South Africa, argues that changes must be made and asks the question of …how to construct universally valid guidelines for collaborative international medical research with the view to enhancing sensitivity to issues of justice and …common humanity? Benatar argues the world medical research community faces the challenge of developing a code of ethics which is universal in times which are characterized by differing health care systems, vastly different economic conditions ranging from immense wealth to abject poverty, changing health profiles and even the difference as to how people from different societies view health and sickness. Benatar maintains that medical research, health care, conditions of life around the world and how humans flourish may seem separate but they are all interdependent…taking such a comprehensive global perspective adds complexity to the task of crafting universal research ethics guidelines.

Since 1999 the World Medical Association (WMA) has looked at amendments to the Declaration of Helsinki particularly in reference to placebo-controlled trials. However, according to Rothman these revisions by the WMA are confusing and ambiguous. More central to the debate, according to Rothman, are such issues as the vulnerability of the populations to be tested, whether the participants will understand

331 S. R. Benatar, ibid. p. 392
the protocol, whether they will be able to distinguish experiment from therapy, resist pressure to participate and understand a two-armed, placebo-based design.\textsuperscript{332} Rothman argues the provisions for ethical research are inadequate particularly with respect to research carried out in Third World and developing countries. Benatar argues there is a need for a paradigm shift in thinking and in action towards reciprocal relationships between individuals, society, and the notion of rational self-interest and long term interdependence.\textsuperscript{333} This in turn would reflect recognition of the adverse effects of globalisation and promote and protect individual human rights.

Despite society’s demands for constant advances in medical science, this need must be balanced against the absolute necessity for all science to be ethically and scientifically sound. In this there is no room for compromise. The Holocaust through the Nuremberg Code, the Declaration of Helsinki and the national and institutional codes is a constant reminder of the ‘evil wrought by medicine’. As Caplan maintained, contemporary issues of medical ethics cannot be considered ‘outside the shadow of the Holocaust’. Müller-Hill argues that science should be a servant not the master of human kind.\textsuperscript{334} The challenge now and in the future is to make science a reflection of the highest moral standards of society which history tells us, without doubt, should always be a source of concern.

\textsuperscript{332} D. T. Rothman, \textit{Back to first principles}, op. cit., p. 287
\textsuperscript{333} S. R. Benatar, \textit{Justice and Medical Research}, op.cit., p. 392
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Appendix I
Ethics and Privacy Application
Please Note: Each question on this form has instructions and links to relevant documents and guidelines on how to answer that particular question as hidden text. To show the text with the hidden text effect, click symbol “[¶]” (Show/Hide) (situated next to the “Zoom” button) on the “Standard” toolbar. When hidden text is shown it is marked with a dotted underline. This text will not be seen on the printed version.

Please note the following:

1. This application must be completed electronically or typewritten
2. Complete all sections except those specifically not applicable
3. Use lay terms wherever possible
4. Do not alter the order of questions or layout of the application form
5. “Y” signifies Yes, “N” signifies No, and “N/A” signifies Not applicable
6. Some “Y”/“N” boxes have been reversed so take care in answering the questions
7. HREC refers to Human Research Ethics Committee

This form has been prepared in collaboration between Ms G Briody, Associate Professor M Grimm, Professor A Lloyd, Associate Professor J Watson and Ms M Wright of the Human Research Ethics Committees (HRECs) of the University of Sydney and the University of New South Wales.
SECTION 1: ADMINISTRATION

This section is obligatory

1.1 (a) Full project title

A History of Concern: The ethical dilemma of using Nazi Medical Research Data in the name of Medical and Scientific Research.

(b) Short name by which the project will be known

A History of Concern

(c) Name of Chief Investigator

Professor Konrad Kwiet

(d) Provide a brief summary of the project in lay language (approximately 100 words)

During the Holocaust over 1000 victims died and many more suffered both physically and mentally as a result of medical experimentation performed by Nazi doctors. In the post war period debate has been ongoing, often emotional and controversial, by Holocaust survivors, historians, academics and the scientific community as to the morality of using the findings of these experiments in subsequent medical and scientific research. This study examines the case for and against the use of the data through literature already available and through a qualitative research program. The latter involves a questionnaire presented to 12-15 world renowned physicians/researchers whose work is unrelated to the Nazi experience. The primary purpose of the study will be to get a more contemporary view of the ethical issues and how this view compares to that of earlier commentators.

(e) Outline the scientific merits of this study (including potential contributions to the body of knowledge and methodological rigor) (approximately 100 words)

Scientific and medical experimentation is bringing changes at such a rapid rate that researchers face dilemmas posed by the potential abuses of these medical advances, e.g. the “manufacture” of children through genetic manipulation at the embryo level. As Dr Arthur Caplan argues “You can’t think about contemporary issues of medical ethics outside the shadow of the Holocaust.” This study asks scientists and physicians whose work is unrelated to the Nazi experiments their views on the whether use of the Nazi data is ethical particularly in relation to contemporary thinking on the interpretation and role of ethics in today’s world. Important questions are addressed such as how can we responsibly mix law, religion and science and how can we ensure that in the future our scientists will adhere to a strict code of ethics and respect and protect the individual while working for the betterment of society.

1.2 Indicate the institutional ethics committee that you consider to be the primary one for this project. (In general, if the Chief Investigator is a University employee, then the University should be considered to be the primary site. If the Chief Investigator or participants are from a health care service, then the Area Health Service ethics committee should be considered as the primary site.)

University of Sydney Ethics Committee

1.3 (a) Has this project already been submitted to any other HREC(s)?

X N Y

(b) Will this project be submitted to any other HREC(s)?

X N Y

If you answered YES to (a) or (b), give the name of the HREC(s), and indicate the status of the application at each (i.e., submitted, approved, deferred or rejected). Attach copies of the correspondence with each of the other HREC(s). Please do not submit to more than one HREC concurrently.
1.4 List the following details of the Chief Investigator/Supervisor, any Co-Researcher(s), Associate Researcher(s) and Student(s).

### Chief Investigator/Supervisor

<table>
<thead>
<tr>
<th>Name</th>
<th>Konrad Kwiet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Professor</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Professor for Jewish Studies, Roth Lecturer for Holocaust Studies</td>
</tr>
<tr>
<td>Positions held: employed, conjoint/adjunct/visiting</td>
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</tr>
</tbody>
</table>

### Co-Researcher(s), Associate Researcher(s), Student(s) or other Personnel involved in the study

**If appropriate indicate for each named person whether they are University staff, student or neither. If the named person is a student, nominate (in the Qualifications section) the degree for which he/she is enrolled.**

<table>
<thead>
<tr>
<th>Name</th>
<th>Suzanne D. Rutland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Ph.D., MA (Hons), BA (Hons), Dip.Ed.</td>
</tr>
<tr>
<td>Positions held: employed, conjoint/adjunct/visiting</td>
<td>Chair, Department of Hebrew, Biblical and Jewish Studies</td>
</tr>
<tr>
<td>Full mailing address (including building number)</td>
<td>Room 618, Mungo McCallum, A17 University of Sydney 2006 NSW</td>
</tr>
<tr>
<td>Telephone</td>
<td>02-9351 6662</td>
</tr>
<tr>
<td>Fax</td>
<td>02-9351 2319</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:Suzanne.rutland@arts.usyd.edu.au">Suzanne.rutland@arts.usyd.edu.au</a></td>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Ross W. Halpin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>MA Research candidate</td>
</tr>
<tr>
<td>Qualifications</td>
<td>B.Com (Economics), BA, Dip.Ed.</td>
</tr>
<tr>
<td>Positions held: employed, conjoint/adjunct/visiting</td>
<td>C/o Department of Hebrew, Biblical and Jewish Studies</td>
</tr>
<tr>
<td>Full mailing address (including building number)</td>
<td>C/o Department of Hebrew, Biblical and Jewish Studies University of Sydney NSW 2006</td>
</tr>
<tr>
<td>Telephone</td>
<td>02-9967 8739</td>
</tr>
<tr>
<td>Fax</td>
<td></td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:rwhalpin@gmail.com">rwhalpin@gmail.com</a></td>
</tr>
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Insert additional boxes if necessary.
1.5 Who is the nominated Contact Person (from those listed in 1.4 above) for this protocol?

<table>
<thead>
<tr>
<th>Name</th>
<th>Telephone Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Konrad Kwiet</td>
<td>02-93513172</td>
<td><a href="mailto:Konrad.kwiet@arts.usyd.edu.au">Konrad.kwiet@arts.usyd.edu.au</a></td>
</tr>
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</table>

1.6 Who is the person preparing this document?

<table>
<thead>
<tr>
<th>Name</th>
<th>Telephone Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ross Halpin</td>
<td>02-99678739</td>
<td><a href="mailto:rwhalpin@gmail.com">rwhalpin@gmail.com</a></td>
</tr>
</tbody>
</table>

1.7 In 1.4 are there students involved as researchers in this project?  

[ ] Yes  [ ] No

If you answered YES, provide the name of each student/s and the degree/s which this study will contribute towards (i.e., Honours, Masters, PhD, etc.) 

1.8 (a) Indicate the proposed date of commencement of the project.  
Projects may not commence without the prior written approval of the HREC.

Date 01/04/2007

(b) Indicate the proposed completion date of the project.

Date 30/11/2008

1.9 Indicate all location(s) at which the research will be undertaken.

Australia  The research will incorporate correspondence with participants from Israel, USA, UK and South Africa

1.10 (a) Has this protocol received research funding/contracting or is this submission being made as part of an application for research funding/contracting?  

[ ] Yes  [ ] No

If you answered YES, list the funding/contracting bodies to which you have submitted, or intend to submit, this project. Attach a copy of the grant application(s), contract(s) or similar agreement(s).

Funding/Contracting body 1:
Funding/Contracting body 2:
Funding/Contracting body 3:

(b) What is the outcome of these funding/contracting application(s) (please tick the appropriate box)

Funding/Contracting body 1:  
[ ] Approved  [ ] Pending  [ ] Refused

Funding/Contracting body 2:  
[ ] Approved  [ ] Pending  [ ] Refused

Funding/Contracting body 3:  
[ ] Approved  [ ] Pending  [ ] Refused

(c) Will this study still be undertaken if funding is not successful?  

[ ] Yes  [ ] No

(d) If the title of the project submitted for funding is different from that listed
under Q1.1(a), state it below.

Proceed to Section 2.


<table>
<thead>
<tr>
<th>Nature of Research</th>
<th>Yes</th>
<th>No</th>
<th>N</th>
<th>Y</th>
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<tbody>
<tr>
<td>Behavioural observation</td>
<td>X</td>
<td>N</td>
<td>Y</td>
<td></td>
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<tr>
<td>Self-report questionnaire(s)</td>
<td>N</td>
<td>X</td>
<td>Y</td>
<td></td>
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<tr>
<td>Interview(s)</td>
<td>X</td>
<td>N</td>
<td>Y</td>
<td></td>
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<tr>
<td>Qualitative methodologies (e.g. focus groups)</td>
<td>N</td>
<td>X</td>
<td>Y</td>
<td></td>
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<tr>
<td>Psychological experiments</td>
<td>X</td>
<td>N</td>
<td>Y</td>
<td></td>
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<tr>
<td>Epidemiological studies</td>
<td>X</td>
<td>N</td>
<td>Y</td>
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<tr>
<td>Data linkage studies</td>
<td>X</td>
<td>N</td>
<td>Y</td>
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<tr>
<td>Psychiatric or clinical psychology studies</td>
<td>X</td>
<td>N</td>
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<tr>
<td>Human physiological investigation(s)</td>
<td>X</td>
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<td>Biomechanical device(s)</td>
<td>X</td>
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<td>Human tissue (see Section 11)</td>
<td>X</td>
<td>N</td>
<td>Y</td>
<td></td>
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<tr>
<td>Human genetic analysis (see Section 11)</td>
<td>X</td>
<td>N</td>
<td>Y</td>
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</tr>
<tr>
<td>A clinical trial of drug(s) or device(s) (see Section 12)</td>
<td>X</td>
<td>N</td>
<td>Y</td>
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<tr>
<td>Other (please specify in the box below)</td>
<td>X</td>
<td>N</td>
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Proceed to Section 3.
### SECTION 3: PARTICIPANTS AND RECRUITMENT
(refer to the National Statement on Ethical Conduct in Research Involving Humans, p. 25-34)

*This section is obligatory*

3.1 (a) What is the age range of all participants involved in this study?

40-75

(b) If the participants include children (defined by statute for this purpose as anyone under 18) has a Prohibited Employment Declaration Form for the researchers (“criminal record check”) been lodged with the University or hospital? (see [http://www.kids.nsw.gov.au/check/](http://www.kids.nsw.gov.au/check/))

If you answered NO, give reasons why not.

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

3.2 Are the participants:-

( more than one may apply)

- in a teacher–student relationship with the researchers or their associates? $\times$ $\sqrt{\ }$
- in an employer–employee relationship with the researchers or their associates? $\times$ $\sqrt{\ }$
- in any other dependent relationship with the researchers or their associates? $\times$ $\sqrt{\ }$
- wards of the state? $\times$ $\sqrt{\ }$
- prisoners? $\times$ $\sqrt{\ }$
- refugees? $\times$ $\sqrt{\ }$
- members of the armed services? $\times$ $\sqrt{\ }$
- mentally ill? $\times$ $\sqrt{\ }$
- intellectually impaired? $\times$ $\sqrt{\ }$
- unconscious or critically ill patients? $\times$ $\sqrt{\ }$
- under the Guardianship Act 1987 (as amended)? $\times$ $\sqrt{\ }$
- in a doctor–patient relationship or a health giver–receiver relationship with the researchers or their associates? $\times$ $\sqrt{\ }$

If you answered YES to any of the above, provide details.
3.3 (a) What is the sample size for the study? Comment on how this sample size will allow the aims of the study to be achieved.

The sample size of this qualitative research will be between 10 and 12 physicians and 1 Rabbi. It could increase to 15 as I have had interest from other physicians/researchers.

(b) How will the participants be recruited?

The main method has been by email. Each participant has been sent a brief summary of the topic under review and asked if they are interested in taking part in such a program of research.

3.4 (a) Does recruitment involve a direct personal approach from the researchers to the potential participants?  

If you answered YES, explain how the real, or perceived, coercion from researchers for potential participants to enrol has been addressed.

Each participant will be sent a consent form which will be signed by the candidate. This form will *give each participant the right to withdraw at any time  
* give each participant the right to remain anonymous  
* Give each participant contact details of the relevant people if there are any concerns regarding the process e.g. Chief Investigator and Ethics Committee.

(b) Does recruitment involve the circulation/publication of an advertisement, circular, letter, etc?

If you answered YES, provide a copy and indicate where and how often it will be published.

3.5 Will participants receive any reimbursement of out-of-pocket expenses, or financial or other “rewards” as a result of participation?  

If you answered YES, what is the amount or nature of the reward and the justification for this?
3.6 Is the research targeting any particular ethnic or community group? [Y]  
If you answered YES, which group is being targeted?

The project involves representatives from the medical fraternity and one Rabbi

If you answered YES, is there an investigator who is a member of the Particular ethnic or community group? [X]  

If you answered YES to 3.6, has this project been planned in consultation with a representative of this group? [X]  

If you answered YES, who have you consulted and how do they represent this group?

If you answered NO, give reasons why you have not consulted.

Proceed to Section 4.
SECTION 4: PRIVACY

Refer to the National Statement on Ethical Conduct in Research Involving Humans, p. 52-53. For health related information refer to the Statutory Guidelines made under the Health Records and Information Privacy (HRIP) Act 2002 (NSW) Statutory Guidelines on Research via Privacy NSW HRIP Act and also the NHMRC overview document The Regulation of Health Information Privacy in Australia

This section is obligatory

4.1 Is there a requirement for the researchers to identify, collect, use, or disclose information of a personal nature (either identifiable or potentially identifiable) about individuals without their consent?

(a) from Commonwealth departments or agencies? ☒ ☐
(b) from State departments or agencies? ☒ ☐
(c) from other third parties, such as non-government organisations? ☒ ☐

If you answered YES to (a), (b) or (c), state what information will be sought and how many records will be accessed.

4.2 (a) Is there a requirement for the researchers to identify, collect, use, or disclose personal health information about individuals without their consent, which is identifiable or potentially identifiable? ☒ ☐

If you answered NO, you do not need to complete any more of Section 4. Go to Section 5

If you answered YES, indicate the reason(s)

– The project involves linkage of data ☐
– Scientific deficiencies would result if de-identified information was used ☒
– Other ☐

Please provide details
4.3 Will the health information that is identifiable or potentially identifiable with respect to individuals be collected, used or disclosed without the consent of the individual(s) concerned?  

If you answered YES, indicate the reason(s)

- The size of the population involved in the research.  
- The proportion of subjects who are likely to have moved or died since the health information was originally collected.  
- The risk of introducing bias into the research, affecting the generalisability and validity of the results.  
- The risk of creating additional threats to privacy by having to link information in order to locate and contact subjects to seek their consent of the results.  
- The risk of inflicting psychological, social or other harm by contacting subjects with particular conditions in certain circumstances.  
- The difficulty of contacting individuals directly when there is no existing or continuing relationship between the organisation and the individuals.  
- The difficulty of contacting individuals indirectly through public means, such as advertisement and notices.  
- Other

Please provide details

4.4 Was this research the primary purpose of collecting the health information?  

If you answered YES, you do not need to complete any further questions in Section 4. Go to Section 5

If you answered NO, please provide details

N/A

4.5 Would the subjects have expected the researchers to use or disclose their health information for the purposes of this project?  

Please provide details
4.6 Explain why the collection, use or disclosure of this information is in the public interest, and why the public interest in the project substantially outweighs the public interest in the protection of privacy.

Proceed to Section 5.
## SECTION 5: COLLECTION OF DATA AND DISSEMINATION OF RESULTS
(refer to the National Statement on Ethical Conduct in Research Involving Humans, p. 52-53)

### This section is obligatory

5.1 Will any part of the study involve recordings using audio tape, film/video, or other electronic medium?

- [ ] Yes
- [x] No

If you answered YES, what is the medium and how it will be used?

5.2 Does your research involve the secretive use of photographs, tape-recordings, or any other form of record-taking?

- [x] Yes
- [ ] No

If you answered YES, provide details and a justification for the secrecy.

5.3 (a) How will the results of the study be disseminated (e.g. via publication in journals and presentations in scientific meetings)?

The results of the study will form part of a masters research degree and may result in publications in journals and presentation at academic conferences

(b) How will feedback be made available to participants (e.g. via a newsletter)?

Each participant will receive a summary of the results of the study. All replies will be acknowledged

5.4 How will the confidentiality of the data, including the identity of participants, be ensured during collection and dissemination?

No information will be disclosed without the written consent of each participant. Participants will be given the opportunity to stay anonymous, be identified by initials or fully identified

5.5 Is there any possibility that information of a personal nature could be revealed to persons not directly connected with this research?

- [x] Yes
- [ ] No

If you answered YES, provide details.
5.6 (a) What is the proposed storage location of, and access to, materials collected during the study (including files, audiotapes, questionnaires, videotapes, photographs)?

The questionnaires will be sent by email and returned by email or fax. The information will be stored on computer files and kept in a study under lock and key. Copies of correspondence will be forwarded to Professor Kwiet during the period of study. This information will be kept by Professor Kwiet under lock and key.

(b) Specify how long materials collected during the study (including files, audiotapes, questionnaires, videotapes, photographs) will be retained after the study, and how they will ultimately be disposed of.

Please ensure that the period of data retention stated here is appropriate to the nature of the proposed study. If the project involves clinical trial(s), the data should be kept for a minimum of 15 years (please refer to http://www.fda.gov/oc/ohrt/irbs/websites.html). If the projects do not involve clinical trial(s), the data should be kept for a minimum of 7 years after which time the data may be disposed of. (Please also refer to National Statement on Ethical Conduct in Research Involving Humans, 12.11 for further requirements).

All material will be kept for a minimum of 7 years.

Proceed to Section 6.
SECTION 6: RISKS AND BENEFITS
(refer to the National Statement on Ethical Conduct in Research Involving Humans, p. 51)

This section is obligatory

6.1 (a) Could participation in the research adversely affect the participants? □ N □ Y
If you answered YES, complete 6.1 (b) and 6.1 (c). If you answered NO go to 6.2

(b) Could the research induce any psychological distress in the participants? □ N □ Y

(c) Could the research cause any physical harm to the participants? □ N □ Y
(e.g. from physically invasive procedures or from drug administration, etc)

If you answered YES to (b) or (c) describe the aspect(s) of the research and all the risks involved. Indicate the rate at which these risks are expected to occur. Indicate what facilities and trained personnel are available to deal with such psychological or physical problems.

6.2 Will the true purpose of the research be concealed from the participants? □ N □ Y
If you answered YES, outline the rationale and provide details for the concealment. Provide details of the debriefing. (If you do not intend to debrief, give reasons why not).

6.3 Are you doing research on patients (i.e. subjects receiving health care)? □ N □ Y
If you answered YES, list the procedures/techniques which would not form part of routine clinical management.

6.4 Is this research expected to benefit the participants directly or indirectly? □ N □ Y
If you answered YES, provide details.

The participants will have an interest in the outcomes. They will benefit as experts in their field in applying the outcomes to their own clinical and research activities.

Proceed to Section 7.
SECTION 7: PARTICIPANT INFORMATION AND CONSENT
(refer to the National Statement on Ethical Conduct in Research Involving Humans, p.12-13, p.28-29, p. 40-42, p.44-45, p.47-50, p.54)

This section is obligatory

7.1 Will a Participant Information Statement be provided?

7.2 Will written consent be obtained?

If you answered NO to either 7.1 or 7.2, give reasons why not.

7.3 In the case of participants who may not be fluent in English or who have difficulty understanding English, will arrangements be made to ensure comprehension of the Participant Information Statement and Consent Form?

If you answered NO, give reasons. If you answered YES, what arrangements have been made?

All participants are fluent in English

7.4 (a) Do the Participant Information Statement and Consent Form have:-

– the first page of the Participant Information Statement and Consent Form printed on appropriate institutional letterhead?

– the title of the project on every page, including the Revocation of Consent? (if one is required) (Use a short title as appropriate)

– the page numbers expressed as page 1 of .., 2 of .., 3 of .. etc?

– an assurance that participation is voluntary and participants are permitted to withdraw from the project at any time without penalty?

– the name and telephone number of an appropriate researcher?

– a telephone number, fax number and E-mail address for the HREC, should a participant wish to make a complaint about the conduct of the research project?

(b) How has the possibility of withdrawal from the study been addressed in the Participant Information Statement and Consent Form?

Yes

Proceed to Section 8.
SECTION 8: CONFLICT OF INTEREST AND OTHER ETHICAL ISSUES
(refer to the National Statement on Ethical Conduct in Research Involving Humans, p. 51–54, Appendix 2)

This section is obligatory

8.1 Are any “conflict of interest” issues likely to arise in relation to this research?  

If you answered YES, provide details.

8.2 Do the researchers have any affiliation with, or financial involvement in, any organisation or entity with direct or indirect interests in the subject matter or materials of this research?  
(Note that such benefits must be declared in the Participant Information Statement.)

If you answered YES, provide details.

8.3 Do the researchers expect to obtain any direct or indirect financial or other benefits from conducting this research?  
(Note that such benefits must be declared in the Participant Information Statement.)

If you answered YES, provide details.

8.4 (a) Have conditions already been imposed upon the use (eg. publication), or ownership of the results (eg. scientific presentations) or materials (eg. audio-recordings), by any party other than the listed researchers?  

(b) Are such conditions likely to be imposed in the future?

If you answered YES to (a) or (b), provide details.

Proceed to Section 9.
SECTION 9: DESCRIPTION OF PROJECT  
(refer to the National Statement on Ethical Conduct in Research Involving Humans, p. 13)

This section is obligatory

9.1 Describe the project using lay terms wherever possible, including the aims, hypotheses, research plan and potential significance. Where relevant, provide the projected number, sex, and age range of participants (including inclusion/exclusion criteria). You must satisfy the HREC that the study is scientifically valid and conducted in accordance with the accepted ethical principles governing research involving humans.

The description must be no longer than 2 pages and must be in a font size of at least 10 points.
**A History of Concern: The ethical dilemma of using Nazi medical research data in the name of medical and scientific research.**

It is over 60 years since the end of the Nuremberg Medical Trials. Since then there has been fierce debate amongst historians, scientists, physicians and survivors regarding the use in further research of data obtained by Nazi experimentation. In the majority of cases these commentators have had one thing in common – they all have an association with or deep interest in the subject under consideration in one form or another. The survivor of the experimentation is likely to have an intensely emotional interest and very strong views on this matter. The historian, particularly the Holocaust historian, has an academic interest in the subject focusing on why these events occurred and whether they can ever be repeated. The scientist's attitudes are largely based on whether the data obtained are useful or not to ongoing research. Attitudes of the survivor, the historian and the physician are mostly shaped by moral and ethical considerations while in the case of the scientist a more pragmatic and scientific approach would be favoured.

**Hypotheses**

In undertaking such a project one is confronted with a range of emotions. On the one hand there is shock and disbelief at the acts of pain, suffering and death inflicted on the subjects whether Jew, gypsy or the physically and mentally disabled. There is bewilderment and sadness that one human being can commit such acts against another. On a more practical note one is also aware that scientific data, although unethically and immorally derived, may have value, may be used to save a life, so one may feel an obligation to use that data.

It appears from surveying the literature that this question polarizes people who address this issue. There is usually an emphatic yes or no answer to the question, with only a minority voicing an opinion either way with conditions. For example, there has been agreement that the data can be used only if the true source of the data and the means by which it was obtained is fully disclosed.

It is hoped this study will throw new light on the dilemma which has troubled the medical and scientific community as well as governments for over 60 years.

**Aim:**

The aim of this study is to search for answers to a very complex issue. It will aim to collect and evaluate the attitudes and arguments of renowned professionals and to draw conclusions on the ethical dilemmas facing current scientists. From one extreme there is the argument that the scientific work of the Nazi doctor was not science at all while at the other extreme there is the argument that some of the work was invaluable. There is also the question of whether moral inquiry into the medical practices of the Nazi doctor is immoral in itself. The views of historians, scientists, survivors etc who either lived through the Nazi era or had taken an academic or scientific interest in the subject after the War in Europe have been well documented.

This study attempts to give a fresh, more contemporary view while at the same time relying on the arguments of past participants in the debate. The method is to present cases to professionals who have had varying exposure to the topic and find out their conclusions with an emphasis on contemporary thinking. The medical profession of the Nazi era, whether through the action or non-action of its members, brought the reputation of medicine and scientific research to its lowest ebb. Paradoxically the Nazi doctor believed he or she was working within a code of ethics which was based on the cleansing or purifying of the “German race”. To achieve this they used Jews, gypsies, the handicapped and prisoners, people they considered sub-human and not fit to live. Since the Nuremberg medical trials a majority of commentators have condemned the experiments as “bad” science and “unethical”. Some of these conclusions have been based on emotion, rightly so, as well on the heinous nature of the crimes.

Based on the descriptive and interpretive evidence I will attempt to answer key questions: what makes scientific research valid? Can science and ethics be separated? Are scientists who consider they are working for the better of society above the law or above a code of ethics? The experiments carried out before, during and after the Nuremberg Medical Trials, not only in Germany but in Western and Soviet countries, indicate that some scientists, government agencies and businesses believe they have license to do what they think is good for society, or in the case of business for profit, at the expense of the health and life of the individual. From these questions comes the most important question. How does society and the individual ensure that in the future scientists and governments adhere to a strict code of ethics and the atrocities of the past can never be repeated
Research Plan

The first part of the proposed study is designed to subject the relevant literature to critical analysis. The second part involves the conclusions of the arguments of the medical professionals selected - physicians, psychiatrists and scientists – all of whom are either clinicians and/or medical researchers plus a Rabbi with legal qualifications, who will give an Halachic perspective. Each participant will be given 4 factual case histories about which they are requested to answer 8 questions. The cases and questions are attached.

Names of individual participants have been removed for privacy purposes

Proceed to section 10.
## SECTION 10: FIELD-BASED RESEARCH (i.e., CONDUCTED OFF CAMPUS OR OUTSIDE A HEALTH SERVICE) INCLUDING RESEARCH CONDUCTED OUTSIDE AUSTRALIA
(refer to the National Statement on Ethical Conduct in Research Involving Humans, p.14, p.31-32)

10.1 Is your research conducted

(i) Outside Australia

(ii) Off Campus

(iii) In an Aboriginal and Torres Strait Islander Community

(iv) In a School

(v) In a Corporation

(vi) In a Government Department

(vii) In a Hospital

If you answered NO to all of the above, go to Section 11

10.2 Have you obtained formal permission from relevant authorities for entry to the area to carry out research (e.g., national or local government bodies, organisations of local communities)?

If you answered YES, name the relevant authorities and attach the relevant correspondence.

If you answered NO, give reasons.

Permission is not required as the participants are private citizens and are giving their private opinions

10.3 If research is proposed among members of specific organisations, have you sought approval from those organisations (e.g., church groups, national associations, etc)?

If you answered YES, name the relevant authorities and attach the relevant correspondence or letter of support.

N/A

If you answered NO, give reasons.

N/A
10.4 Does the research involve individuals or groups of people who are not formally organised (e.g., people living in a village or town, etc)?

If you answered YES, indicate the context of the research. How will you obtain access to participants? Indicate any ethical issues that you can foresee in this approach.

The research will take the form of a set of questions based on four case studies. These cases and the questionnaire will be sent via email or faxed. I cannot foresee any ethical issues to this approach.

10.5 Will your research necessarily involve the acquisition of objects of valuable cultural property (e.g., carvings, paintings, etc)?

If you answered YES, give details of arrangements with owners of the property with regard to access to/acquisition of these items, where appropriate.

10.6 Will your research necessarily involve any activities that are likely to be seen by research participants and/or members of their local communities as in conflict with local practices and customs (e.g. regarding religious or ritual participation)?

If you answered YES, provide details.

Proceed to Section 11.
SECTION 11: RESEARCH INVOLVING BLOOD, TISSUE, ETC.
(refer to the National Statement on Ethical Conduct in Research Involving Humans, p.33, p.43-50)

This section must be completed for all research involving blood or tissue samples, or involving physical hazards.

11.1 Does this section apply to your research?  

☐ ☐  

If NO, Go to Section 12

11.2 Will human blood or tissue be used in the research?  

☐ ☐  

If you answered YES, what procedures are in place to minimise the infectious and other risks to participants and researchers?

11.3 Will human embryos, fetal tissue, or placental tissue be involved?  

☐ ☐  

If you answered YES, provide details.

11.4 Has this blood or tissue already been collected and stored?  

☐ ☐  

If you answered YES, what was the original purpose of collection for the stored blood or tissue you seek to use?

11.5 Describe the proposed storage arrangements of the blood and/or tissue samples collected. Indicate how long the blood or tissue will be kept. Indicate how the samples will be disposed of upon the completion of the research.

11.6 Will genetically modified organisms or other gene modification techniques be used in the research?  

☐ ☐  

If you answered YES, provide details. Describe the procedures, which are in place to minimise the risks to participants and researchers.
11.7 Will toxins, mutagens, teratogens or carcinogens be used?  

If you answered YES, provide details. Describe the procedures, which are in place to minimise the risks to participants and researchers.

11.8 Will biohazardous material be used?  

If you answered YES, provide details. Describe the procedures, which are in place to minimise the risks to participants and researchers.

11.9 Will participants or researchers be exposed to ionising radiation?  

If you answered YES, provide details of the radiation exposure, including a quantitative assessment of the absorbed dose, supported either by dosimetric calculations or by other information. Describe the procedures, which are in place to minimise the risks to participants and researchers. The study should also be approved by the relevant institutional Radiation Safety authority.

Proceed to Section 12.
SECTION 12: CLINICAL TRIALS OF DRUGS OR DEVICES
(refer to the National Statement on Ethical Conduct in Research Involving Humans, p. 35-38, and also to Therapeutic Goods Administration, http://www.tga.gov.au)

This section must be completed for all applications involving clinical trial(s).

12.1 Does this section apply to your research? [X] N Y

If NO, Go to Section 13

12.2 (i) Is the research being conducted under the Clinical Trial Notification Scheme (CTN)? [N] Y

(ii) Is the research being conducted under the Clinical Trial Exemption Scheme (CTX)? [N] Y

(iii) Is the research using only approved drug(s)/device(s) in accordance with Therapeutic Goods Administration Approved Product Information? (Note reversed order of the responses) [Y] N

12.3 (a) Will this research be undertaken on behalf of (or at the request of) a pharmaceutical company, or other commercial entity, or any other sponsor? [N] Y

If you answered YES, provide details of the name of the sponsor (and co-sponsors if any)?
This information should be included in the Participant Information Statement and Consent Form.

Will the sponsor(s) provide any support in money or kind? Provide details.

(b) If you answered YES to (a) will that entity undertake in writing to abide by either the Medicines Australia Guidelines for Injury Resulting from Participation in an Industry-Sponsored Clinical Trial (www.medicinesaustralia.com.au) or the ABPI Clinical Trial Compensation Guidelines? [Y] N

If you answered NO to this question, provide details.

(c) If you answered YES to (a), will that entity undertake in writing to indemnify the institution, the HREC(s) and the researchers? (If you answered YES, a copy of the appropriate deed or letter of indemnity should be included with the application)? [Y] N

If you answered NO to this question, provide details.
(d) If you answered YES to (a), (b) or (c), does the sponsor hold a current insurance policy to cover this project? (If you answered YES, provide a certificate of currency).

If you answered NO to this question, provide details.

12.4 List any drugs or devices to be used, and their TGA approval status both in Australia and overseas

12.5 How many participants are projected to be enrolled into the trial at this site and in total? (Please give a single figure for each, not a range)

12.6 What is the projected duration of the trial, from first enrolment to the last protocol interaction with the last enrolled subject (in years)?

12.7 If all projected participants complete the protocol:  
   (a) what total payment will be received from the sponsoring company?  
   (Please give a single figure, not a range)

   (b) what additional “in kind” support (ie free drug, equipment, etc), if any, will be provided by the sponsoring company?

For instructions on how to obtain TGA approval, please refer to http://www.tga.gov.au.

Proceed to the Section 13.
SECTION 13. DECLARATION OF RESEARCHERS

I/we apply for approval to conduct the research. If approval is granted, it will be undertaken in accordance with this application and other relevant laws, regulations and guidelines.

Signature of Chief Investigator or Supervisor

Name: Professor Konrad Kwiet
Signature: ............................................................... Date: .................
(print)

Signature of Associate Researcher(s) or Student(s)

Name: Associate Professor Suzanne D. Rutland
Signature: ............................................................... Date: .................
(print)

Name: Ross Halpin
Signature: ............................................................... Date: .................
(print)

Name: ............................................................... Signature: ............................................................... Date: .................
(print)

Signature of appropriate senior officer NOT ASSOCIATED with the research (e.g. Head of School/Department/Unit/Dean of Faculty or Head of Division).

After careful consideration and appropriate consultation, I have reviewed the attached HREC application, including the Participant Information Statement and Consent Form. I am satisfied that the scientific merit of this work justifies its being performed and that the information which will be obtained justifies the inconvenience and risks to participants.

Name: ............................................................... (print)
Title: ............................................................... (print)
Position: ............................................................... (print)

Signature: ............................................................... Date: .................
### CHECKLIST FOR FULL ETHICS APPLICATION

The following documents are to be attached as indicated in the Guide to Applicants.

Check N/A if not applicable.

<table>
<thead>
<tr>
<th>Document</th>
<th>Included</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you included <strong>ONE (1) original copy (plus 15 copies)</strong> of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Original application</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Consent form(s)</td>
<td>x</td>
<td>N/A</td>
</tr>
<tr>
<td>Participant Information Statement(s)</td>
<td>y</td>
<td></td>
</tr>
<tr>
<td>Recruitment advertisement/circular</td>
<td>y</td>
<td>N/A</td>
</tr>
<tr>
<td>Evidence of permission to conduct research in other locations</td>
<td>x</td>
<td>N/A</td>
</tr>
<tr>
<td>Evidence of approval/rejection by other HREC(s), including comments and requested alterations to the protocol</td>
<td>y</td>
<td>x</td>
</tr>
<tr>
<td>Copy of questionnaire(s), survey questions, interview topics to be covered etc.</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Statement from a medical/paramedical practitioner accepting responsibility for specific procedures.</td>
<td>y</td>
<td>N/A</td>
</tr>
<tr>
<td>Risk management unit report regarding genetically-modified organisms, biohazards, Ionizing radiation, lasers or carcinogens</td>
<td>y</td>
<td>x</td>
</tr>
<tr>
<td>One copy of the grant application to be attached to the original copy.</td>
<td>y</td>
<td>x</td>
</tr>
<tr>
<td>Any form requiring signature by the HREC (one copy) e.g. CTN/CTX Forms</td>
<td>y</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Appendix II
Invitation to Participate in the Study

Ross Halpin
17 Waters Rd
Naremburn NSW 2065
Rwhalpin@gmail.com

Dear

I am doing postgraduate studies MA research degree in the Dept of Hebrew, Biblical and Jewish studies at the University of Sydney. My research topic is “A History of Concern: the ethical dilemma of using Nazi medical research data in the name of medical and scientific research.” Part of the study involves an oral history to be completed by members of the medical and scientific community. The participants are from the US, Israel, UK, South Africa, Germany, Canada and Australia. The research involves answering 8 questions from 4 case studies The task should take no longer than an hour depending how much effort you may wish to apply. The research topic and procedure has been given approval by the Ethics Committee of Sydney University. This particular study in approaching researchers, ethicists etc who are currently in practice is I understand a first the results of which should be very interesting. The results of the study and the names of those who agree to participate will remain anonymous. I can imagine you are very busy however I would be pleased if you would agree to become a participant. I have attached the cases and questions for your review. I have also attached the consent and participants form

Thank you for your consideration

Kind regards

Ross Halpin
rwhalpin@gmail.com
61294607848
August 1, 2007
Appendix III
Case Studies

Case 1
The Freezing and Cold Experiments¹ (Hypothermia)

Cold water experiments were performed between August and October 1942, and dry water experiments performed between February and April 1943 at Dachau Concentration Camp.

Following are details:

- Approximately 280 prisoners (Jews, political prisoners, prisoners of war) were used in the experiments.
- All prisoners were condemned to death.
- None of the prisoners were volunteers or gave their consent.
- Approximately 90 of the participants died directly from the experiments.
- Animals and humans differ widely in their physiological response to cold.

Aim of the experiments:

- To gauge the period in which airmen could survive after being downed in freezing conditions (mainly sea).
- To determine the most efficient and effective means to enable these defense personnel to survive these conditions.

The experiments were performed in the following manner:

- A basin or bath was filled with water and ice was added.
- The subject, either naked or dressed in a flying-suit, was placed in the bath with temperatures at 32°.
- These persons were frozen down to 25° body temperature.
- A large number of the subjects involved were kept in the water so long a time until they were dead. Many others died during the reviving or during the re-warming procedure.
- In one series of experiments the neck and occiput were submerged in water and in another series the neck and occiput were allowed to protrude above the water.
- As the prisoners excreted mucus, fainted and slipped into unconsciousness, the Nazis meticulously recorded the changes in their body temperature, heart rate, muscle response and urine².
Results:

- It was discovered an innovative “Rapid Active Re-warming” technique in resuscitating the frozen victim. This technique of re-warming in hot liquids was the most effective and efficient means of revival. This method completely contradicted the popularly accepted method of slow passive re-warming.
- Fatalities occurred only among the groups in which the body was immersed in such a position that the water covered the occiput and thus affected the brain stem and the hind brain. This led to the introduction of a warming protective device for head and neck.
- During attempts to save severely chilled subjects, it was shown that rapid re-warming was in all cases preferable to slow re-warming, because even after removal from the cold water the temperature of the body tended to continue to sink rapidly.

Post War Events:

The results from these experiments have been used and cited on more than 50 occasions. Two of the more prominent are by:

- Doctor Robert Pozos of the University of Minnesota: His research has been devoted to methods of re-warming frozen victims of cold. Of the Dachau data, Pozo said, “It could advance my work in that it takes human subjects farther than we’re willing.”

- Doctor John Hayward of Victoria University, Vancouver, Canada is mainly concerned with the testing of cold water survival suits that are worn by fishermen in Canada’s frigid ocean waters. He used the Nazi’s recorded cooling curve of the human body to infer how long the suits would protect people in near fatal temperatures. Hayward justified the use of the data in the following way: “I don’t want to have to use the Nazi data, but there is no other and will be no other in an ethical world.”
Case 2
The Phosgene experiments:

Heinrich Himmler ordered experiments on humans in an effort to develop a means of protecting the Germans against phosgene poisoning. Fifty two prisoners were exposed to the toxic gas and four died during the experiment. The remaining prisoners, weak and emaciated, developed pulmonary edema from exposure to the gas. They reportedly were placed in an air tight chamber in which a vial of phosgene gas was broken open and it was measured how long it took for the prisoners to die.

In 1989 the US Environmental Protection Agency (EPA) considered air pollution regulations on “phosgene”, a toxic gas used in the manufacture of pesticides and plastics. Phosgene was used in the Iran-Iraq War and was anticipated to be used in the 1991 Gulf War. Scientists in their studies had relied on animal experiments to predict the effect of the gas on humans. Human data was thought to be the best preference to work from, but rarely available. In fact the Nazi data are the only available experimental information on the effect of phosgene on human beings.5

The EPA put forward a proposal to use the Nazi data from their experiments since these provided more data on humans. It is argued the Nazi phosgene data could have saved lives and prevented illness of residents living in the areas surrounding the manufacturing plants of pesticides and plastics and had the potential to save the lives of troops stationed in the Middle East war zone if a gas attack had taken place.

The EPA chief executive Lee Thomas ruled against using the Nazi data although potentially human lives were at stake.
Case 3
The Children of Bullenhuser

In November 1944, twenty Jewish children between the ages of 5 and 12 were transported from Auschwitz to Neuengamme concentration camp, not far from Hamburg. They were to be used as human guinea pigs in a series of experiments to be conducted by SS doctor Kurt Heissmeyer. The procedure involved the removal of the child’s lymph glands for analysis and the injection of living tuberculosis bacteria into their veins and thus directly into their lungs. This experiment aimed to determine whether the children had any natural immunity to tuberculosis. As a result of this treatment the children became extremely ill.

Five months later the war in Europe was about to end. To ensure that no evidence of the experiment and the resultant condition of the children remained, Heissmeyer and SS-Obersturmführer Arnold Strippel decided to murder the children. On April 5 1945, the children were drugged and hung from hooks on the wall of the basement of the Bullenhuser Damms School where they had been sent from Neuengamme. Some of the children were so lacking in body weight, due to disease and malnutrition, the commandant SS untersturmführer Frahm, had to tighten the ropes using his own weight to ensure death took place. As Frahm would later recall the children were “just like pictures on the wall”.

Aim of experiment:
To determine whether children had any natural immunity to tuberculosis.

Results:

- No scientific or medical value was gained from the experiments.
- The children became seriously ill, one of whom died directly from the experiment. All died from hanging.
Case 4
The Tuskegee Study

The Tuskegee study of syphilis began in 1932 in the United States and was to last 42 years. The study involved 399 poor, uneducated African Americans who had untreated syphilis. The study was unique in that these men were ‘not’ to be treated even when a cure, penicillin, became available. The study was undertaken because the United States Public health Service (USPHS) believed that a study ‘in nature’ of syphilis was necessary because physicians needed to know its natural sequence of symptoms and final outcomes in order to recognise key changes during its course.

Points of interest:

- the subjects were poor black African Americans
- The subjects were deceived into believing they were being treated for ‘bad blood’
- The medical community was given a list of the names of the subjects and agreed not to give antibiotics to any subjects for any condition
- The scientific method was haphazard and scientifically unprofessional – no continuity of medical personnel, no central supervision, no written protocol and large gaps in the study
- The researchers resorted to deception and incentives to encourage the subject to attend consultation. The subjects were offered free meals, free transport, free medical costs and free burials. The latter was important as the researchers got the autopsies to see what damage syphilis had done or not done.
- To determine the progress of the disease, spinal punctures or taps were administered which represented a ten inch needle being inserted between two vertebrae into the cerebrospinal fluid.

Results

- After investigation by Federal authorities it was found that 28 of the original syphilitic group died of syphilis
- 41 wives and 19 children had evidence of syphilis
Appendix IV
Questionnaire

A History of Concern: The ethical dilemma of using Nazi medical research data in the name of medical and scientific research

Questionnaire

1. What is more relevant; the use of the data for scientific research and the saving of a life or the non-use of the data on moral and ethical grounds in the name of the victims and also for the reputation of scientific research?

2. Robert Proctor argues that all the Nazi experiments were not scientific while author William Shirer reports that Nazi doctors were generally murderous “quacks” and were people of the “lowest medical standard.” This view automatically precludes any use of this material on a scientific and moral basis. If on the other hand some of these experiments were considered scientifically valid and carried out by highly qualified and eminent physicians, (which is true for some), yet still considered murderous acts, how would this influence your decision to use the data, ethically and scientifically?

3. Could you comment on the belief that bad ethics and bad science is inextricably linked?

4. Is there any comparison between the Nazi experiments as quoted and the Tuskegee experiments? If so should the use of the data from the latter be questioned?
5. In Case 3 (The Children of Bullenhuser) one of the more horrific experiments, most of the records were destroyed. If however the records were available and indicated scientific validity should the fate – pain, suffering and death - of the children influence the decision to use the data?

6. Does the degree of suffering of the subjects determine the level of acceptance of the data irrespective of the ethics or morality of the experiments? In other words can science be separated from ethics?

7. Every medical practitioner is aware of the Hippocratic Oath. Are you aware of the Nuremberg Medical Code of Ethics and the Act of Helsinki?

8. In your practice and role as a researcher does ethics, as applied to medicine and caring, play a significant role?
PARTICIPANT INFORMATION STATEMENT
Research Project

Date....................

Name........................................
Address..............................................................................................................

Dear......................

Re: Research questionnaire: A History of Concern: The ethical dilemma of using Nazi medical research data in the name of medical and scientific research.

Thank you for agreeing to participate in this qualitative research project. The study is related to a Masters Research degree addressing the issue of the ethical dilemma of using Nazi medical research data in the post Holocaust era. The study is being conducted by Ross Halpin and will form the basis of a Masters Research degree at the University of Sydney under the supervision of Professor Konrad Kwiet.

The process of the project will be in the form of a questionnaire sent to you by email. The email will also contain:

- A participant consent form to be signed and returned via email or fax
- A participant information statement
- Information such as case studies, opinion and views of survivors and historians
- The questionnaire

As a participant in this project you are asked to complete the questionnaire. I would appreciate if you would advise your thoughts and answers in a discursive manner. If you wish assistance please do not hesitate to contact me. The completion of the questionnaire may take a number of hours however this will depend on the time you have available.

As you may be aware, it is a necessary requirement of Sydney University that I have your
formal, written consent for your participation and to use the material in this research project. Although you have consented by email it is most important that you read and acknowledge the consent form and return signed via email or fax as soon as possible.

Participation in this research project is entirely voluntary and you may, of course, withdraw from it at any time. Your identification details will not be made public in the written report of my research, or any subsequent publications, without your consent.

Should you have any questions, please do not hesitate to contact me. Also, as part of university practice, please note that:

‘any person with concerns or complaints about the conduct of a research study can contact the Manager for Ethics Administration, University of Sydney on 61 2 93514811’

The contact details of Professor Kwiet are 61 2 93513172 or Konrad.kwiet@arts.usyd.edu.au

Once again, please accept my sincere thanks, in anticipation, for your valuable contribution to my research and for your support for my project.

Regards

Ross Halpin
21B Covelee Circuit
Middle Cove NSW 2068
Phone contact: 61 2 99678739
Fax: 61 2 99678821
Appendix VI
Participant Consent Form

Professor Konrad Kwiet
Adjunct Professor for Jewish Studies
Roth Lecturer for Holocaust Studies

Post: Building A17
The University of Sydney, NSW 2006
Telephone: +61 2 9351 3172
Facsimile: +61 2 9351 6684
Email: konrad.kwiet@arts.usyd.edu.au

PARTICIPANT CONSENT FORM

I, .................................................. give consent to my participation in the research project

Name (please print)

TITLE: A History of Concern: The ethical dilemma of using Nazi Medical Research Data in the name of medical and scientific research.

In giving my consent I acknowledge that:

1. The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

3. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s) now or in the future.

4. I understand that my involvement is strictly confidential and no information about me will be used in any way that reveals my identity.

Signed: ........................................................................................................................................

Name: ........................................................................................................................................

Date: ........................................................................................................................................

198
APPENDIX 12
Circular of the Minister of the Interior of the German Reich Concerning Guidelines for Innovative Therapy and Human Experimentation (1931)

The Reich Health Council has placed great value on meeting the concern that all doctors receive knowledge of the following guidelines and be unanimous in the decision from this point of view, whereby all doctors upon entry in institutions of closed and open care of the sick or doctors active in care of the sick should be required in writing to observe these guidelines.

1. Medical science, if it is not to come to a standstill, cannot give up, introducing in appropriate cases New Therapy using agents and methods that have yet to be tested sufficiently. Also, medical science cannot dispense completely with Human experimentation. Otherwise progress in the diagnosis, treatment, and the prevention of disease will be hindered or even made impossible.

The physician under these new Guidelines has a special duty to always acknowledge great respect for the life and health of every individual, undergoing innovative therapy or human experimentation.

2. The term innovative therapy used in these Guidelines defines therapeutic experimentation and modes of treatment of humans, which serve the process of healing, also there will be distinguished in specific individual cases the treatment for the recognition, healing or prevention of an illness or suffering, or the removal of a bodily defect, even though the effects and consequences of the therapy cannot yet be adequately determined on the basis of available knowledge.

3. The term human experimentation, as defined in the Guidelines, means operations and methods of treatment of humans undertaken for research
purposes without serving a therapeutic purpose in an individual case, and whose effects and consequences cannot be adequately determined on the basis of available knowledge.

4. Each new healing treatment must be in accord with the principles of medical ethics and the rules of the medical art and science, both in design and its realization. A consideration and calculation of possible harms must be undertaken to determine whether they stand in suitable relationship to the expected benefits. Innovative therapy may only be initiated after first being tested in animal experiments, where this is at all possible.

5. Innovative therapy may only be undertaken if after the affected person or his legal representative has declared himself unambiguously in accord after undergoing instruction for that purpose. Innovative therapy may only be introduced without consent if it is urgently required, and cannot be postponed because of a need to save life or prevent severe damage to health, and if prior consent could not be obtained owing to special circumstances.

6. The use of innovative therapy in the treatment of children or minors under 18 years of age requires especially careful consideration.

7. Medical ethics rejects any exploitation of social hardship in order to undertake innovative therapy.

8. Innovative therapy with living microorganisms requires heightened caution, especially in the case of live pathogens. Such therapy may only be considered permissible if the procedure is relatively harmless and if the achievement of equal benefits by other means cannot be expected under any given circumstances.

9. In medical clinics, polyclinics, hospitals, other health care institutions, innovative therapy may only be conducted by the chief physician himself or, at his specific request and with his full responsibility, by another physician.

10. A written report is required on any new type of treatment, and must contain information about the design, justification, and administration of therapy. Such a report shall state specifically that the subject, or his or her legal representative has been informed of the purpose of the therapy and has given consent. If innovative therapy is given without consent, according to article 5.2 the report must specify the preconditions clearly.

11. The publication of the results of innovative therapy must respect the patient's dignity and the commandments of humanity in every manner.
Appendices

12. Numbers 1 to 11 of these Guidelines apply equally to human experimentation (article no. 3). In addition, the following requirements for such experimentation apply:

a) Without consent. Under no circumstances is nontherapeutic research permissible. Under any circumstances.

b) Any human experiment which can be carried out in animal experiments is not allowed. Only after all basic information has been obtained should human experimentation begin. The information should first be obtained by scientific or laboratory research and from animal experiments for clarification and safety. Under these requirements, given these premises, unfounded or random human experimentation without reason or plan is not permissible.

c) Experiments on children or youth under 18 years are illegal if it endangers the child or youth in the slightest degree.

d) Experiments on dying persons are not in accord with the principles of medical ethics and are not permissible for that reason.

13. Assuming that in accordance with these Guidelines physicians and in particular, responsible directors in charge of medical institutions show a strong feeling of responsibility toward the sick entrusted to their care, it also is hoped that they will maintain receptive to their responsibility to seek relief, improvement, protection, or cure for the patient along new paths, when the accepted and actual state of medical science, according to their medical knowledge, no longer seems adequate.

14. In academic teaching, every opportunity should be taken to stress the special duties of a physician in regard to undertaking innovative therapy or human experimentation; these special responsibilities also apply to the publication of the results of innovative therapy and human experimentation.

Source: Circular of the Reich Minister of the Interior. February 28, 1931. Printed from Reich Health Paper 6,55 (1931). 174 f. Trans. from the German by Nathan Snyder, Judaica Librarian, University of Texas Libraries, The University of Texas at Austin.
Appendix VIII
Nuremberg Medical Code

CIRP Introduction

The judgment by the war crimes tribunal at Nuremberg laid down 10 standards to which physicians must conform when carrying out experiments on human subjects in a new code that is now accepted worldwide.

This judgment established a new standard of ethical medical behavior for the post World War II human rights era. Amongst other requirements, this document enunciates the requirement of voluntary informed consent of the human subject. The principle of voluntary informed consent protects the right of the individual to control his own body.

This code also recognizes that the risk must be weighed against the expected benefit, and that unnecessary pain and suffering must be avoided.

This code recognizes that doctors should avoid actions that injure human patients.

The principles established by this code for medical practice now have been extended into general codes of medical ethics.

The Nuremberg Code (1947)

Permissible Medical Experiments

The great weight of the evidence before us to effect that certain types of medical experiments on human beings, when kept within reasonably well-defined bounds, conform to the ethics of the medical profession generally. The protagonists of the practice of human experimentation justify their views on the basis that such experiments yield results for the good of society that are unprocurable by other methods or means of study. All agree, however, that certain basic principles must be observed in order to satisfy moral, ethical and legal concepts:

1. The voluntary consent of the human subject is absolutely essential. This means that the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, overreaching, or other ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him to make an understanding and enlightened decision. This latter element requires that before the acceptance of an affirmative decision by the experimental subject there should be made known to him the nature, duration, and purpose
of the experiment; the method and means by which it is to be conducted; all inconveniences and hazards reasonably to be expected; and the effects upon his health or person which may possibly come from his participation in the experiment.

The duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates, directs, or engages in the experiment. It is a personal duty and responsibility which may not be delegated to another with impunity.

2. The experiment should be such as to yield fruitful results for the good of society, unprocurable by other methods or means of study, and not random and unnecessary in nature.

3. The experiment should be so designed and based on the results of animal experimentation and a knowledge of the natural history of the disease or other problem under study that the anticipated results justify the performance of the experiment.

4. The experiment should be so conducted as to avoid all unnecessary physical and mental suffering and injury.

5. No experiment should be conducted where there is an a priori reason to believe that death or disabling injury will occur; except, perhaps, in those experiments where the experimental physicians also serve as subjects.

6. The degree of risk to be taken should never exceed that determined by the humanitarian importance of the problem to be solved by the experiment.

7. Proper preparations should be made and adequate facilities provided to protect the experimental subject against even remote possibilities of injury, disability or death.

8. The experiment should be conducted only by scientifically qualified persons. The highest degree of skill and care should be required through all stages of the experiment of those who conduct or engage in the experiment.

9. During the course of the experiment the human subject should be at liberty to bring the experiment to an end if he has reached the physical or mental state where continuation of the experiment seems to him to be impossible.

10. During the course of the experiment the scientist in charge must be prepared to terminate the experiment at any stage, if he has probable cause to believe, in the exercise of the good faith, superior skill and careful judgment required of him, that a continuation of the experiment is likely to result in injury, disability, or death to the experimental subject.

11. Cite as:

Appendix IX
Declaration of Helsinki

Declaration of Helsinki (1964)
[CIRP Note: Ethical research on human subjects into or about the effects of circumcision must be conducted under the provisions of this declaration and those of the Nuremberg Code.]

Recommendations guiding physicians in biomedical research involving human subjects.

*Adopted by the 18th World Medical Assembly, Helsinki, Finland, June 1964, amended by the 29th World Medical Assembly, Tokyo, Japan, October 1975, and the 35th World Medical Assembly, Venice, Italy, October 1983.*

Introduction

It is the mission of the physician to safeguard the health of the people. His or her knowledge and conscience are dedicated to the fulfilment of this mission.

The Declaration of Geneva of the World Medical Association binds the physician with the words, “The health of my patient will be my first consideration,” and the International Code of Medical Ethics declares that, “A physician shall act only in the patient’s interest when providing medical care which might have the effect of weakening the physical and mental condition of the patient.”

The purpose of biomedical research involving human subjects must be to improve diagnostic, therapeutic and prophylactic procedures and the understanding of the aetiology and pathogenesis of disease.

In current medical practice most diagnostic, therapeutic or prophylactic procedures involve hazards. This applies especially to biomedical research.

Medical progress is based on research which ultimately must rest in part on experimentation involving human subjects. In the field of biomedical research a fundamental distinction must be recognised between medical research in which the aim is essentially diagnostic or therapeutic for a patient, and medical research the essential object of which is purely scientific and without implying direct diagnostic or therapeutic value to the person subjected to the research.

Special caution must be exercised in the conduct of research which may affect the environment, and the welfare of animals used for research must be respected.

Because it is essential that the results of laboratory experiments be applied to human beings to further scientific knowledge and to help suffering humanity, the World Medical Association has prepared the following recommendations as a guide to every physician in biomedical research involving human subjects. They should be kept under review in the future. It must be stressed that the standards as drafted are only a guide to physicians all over the world. Physicians are not relieved from criminal, civil and ethical responsibilities under the law of their own countries.
I. Basic Principles

1. Biomedical research involving human subjects must conform to generally accepted scientific principles and should be based on adequately performed laboratory and animal experimentation and on a thorough knowledge of the scientific literature.

2. The design and performance of each experimental procedure involving human subjects should be clearly formulated in an experimental protocol which should be transmitted to a specially appointed independent committee for consideration, comment and guidance.

3. Biomedical research involving human subjects should be conducted only by scientifically qualified persons and under the supervision of a clinically competent medical person. The responsibility for the human subject must always rest with a medically qualified person and never rest on the subject of the research, even though the subject has given his or her consent.

4. Biomedical research involving human subjects cannot legitimately be carried out unless the importance of the objective is in proportion to the inherent risk to the subject.

5. Every biomedical research project involving human subjects should be preceded by careful assessment of predictable risks in comparison with foreseeable benefits to the subject or to others. Concern for the interests of the subject must always prevail over the interests of science and society.

6. The right of the research subject to safeguard his or her integrity must always be respected. Every precaution should be taken to respect the privacy of the subject and to minimize the impact of the study on the subject’s physical and mental integrity and on the personality of the subject.

7. Physicians should abstain from engaging in research projects involving human subjects unless they are satisfied that the hazards involved are believed to be predictable. Physicians should cease any investigation if the hazards are found to outweigh the potential benefits.

8. In publication of the results of his or her research, the physician is obliged to preserve the accuracy of the results. Reports of experimentation not in accordance with the principles laid down in this Declaration should not be accepted for publication.

9. In any research on human beings, each potential subject must be adequately informed of the aims, methods, anticipated benefits and potential hazards of the study and the discomfort it may entail. He or she should be informed that he or she is at liberty to abstain from participation in the study and that he or she is free to withdraw visor her consent to participation at any time. The physician should then obtain the subject’s freely given informed consent, preferably inheriting.
10. When obtaining informed consent for the research project the physician should be particularly cautious if the subject is in dependent relationship to him or her or may consent under duress. In that case the informed consent should be obtained by a physician who isn’t engaged in the investigation and who is completely independent of this official relationship.

11. In case of legal incompetence, informed consent should be obtained from the legal guardian in accordance with national legislation. Where physical or mental incapacity makes it impossible to obtain informed consent, or when the subject is a minor, permission from the responsible relative replaces that of the subject in accordance with national legislation. Whenever the minor child is in fact able to give a consent, the minor’s consent must be obtained in addition to the consent of the minor’s legal guardian.

12. The research protocol should always contain a statement of the ethical considerations involved and should indicate that the principles enunciated in the present declaration are complied with.

II. Medical Research Combined with Professional Care (Clinical Research)

1. In the treatment of the sick person, the physician must be free to use a new diagnostic and therapeutic measure, if in his or her judgement it offers hope of saving life, re-establishing health or alleviating suffering.

2. The potential benefits, hazards and discomfort of a new method should be weighed against the advantages of the best current diagnostic and therapeutic methods.

3. In any medical study, every patient- including those of a control group, if any- should be assured of the best proven diagnostic and therapeutic method.

4. The refusal of the patient to participate in a study must never interfere with the physician-patient relationship.

5. If the physician considers it essential not to obtain informed consent, the specific reasons for this proposal should be stated in the experimental protocol for transmission to the independent committee (1, 2).

6. The physician can combine medical research with professional care, the objective being the acquisition of new medical knowledge, only to the extent that medical research is justified by its potential diagnostic or therapeutic value for the patient.

III. Non-Therapeutic Biomedical Research Involving Human Subjects (Non-Clinical Biomedical Research)

1. In the purely scientific application of medical research carried out on a human being, it is the duty of the physician to remain the protector of the life and health
of that person on whom biomedical research is being carried out.

2. The subjects should be volunteers—either healthy persons or patients for whom the experimental design is not related to the patient’s illness.

3. The investigator or the investigating team should discontinue the research if in his/her or their judgment it may, if continued, be harmful to the individual.

4. In research on man, the interest of science and society should never take precedence over considerations related to the well-being of the subject.

Cite as:
Appendix X
T4 Medical Questionnaire

T4 MEDICAL QUESTIONNAIRE

Questionnaire 1
Case no..............................................................
Name of Institution:...........................................
First and family name of patient:..............maiden name:........
Date of birth:..............City:..............District:........
Last Residence:..............................District:........
Unmarr., marr., wid., div.:.....Relig:.....Race a.....Natlty:........
Address of nearest relative:..............................
Regular visits and by whom (address):..............................
Guardian or Care-Giver (name, address):..............................
Cost-bearer:...................How long in this inst.:................
In other Institutions; when and how long:..............................
How long sick:..............From where and when transferred:..............
Twin yes/no..............Mentally ill blood relatives:................
Diagnosis:............................................................
Primary symptoms:............................................................
Mainly bedridden? yes/no....Very restless yes/no....Confined yes/no....
Incurable phys. illness: yes/no:.............War casualty: yes/no:.............
For schizophrenia: Recent case.....Final stage.....good remission:.............
For retardation: Debility:.......Imbecile:.......Idiot:.............
For epilepsy: Psych. changes.......Average freq. of attacks:.............
For senile disorders: Very confused......Soils self:.............
Therapy (Insulin, Cardiazol, Malaria, Salvarsan, etc.): Lasting effects: yes/no:.............
Referred on the basis of §51, §42b Crim. Code, etc........By.............
Type of Occupation: (Most exact description of work and productivity, e.g. Fieldwork, does not do much.–Locksmith’s shop, good skhled worker.–No vague answers, such as housework, rather precise: cleaning room; etc..
Always indicate also, whether constantly, frequently or only occasionally occupied)...............................
Release expected soon:.............................................................
Remarks:.............................................................
Do not mark in this Space.

.............................................. Place, Date..............................................
.............................................. ..............................................
.............................................. Signature of medical director or his representative)

a German or related blood (German-blooded), Jew, Jewish Mischling (half-breed) 1st or 2nd degree, Negro (Mischling), Gypsy (Mischling), etc.

Appendix XI
Correspondence Gravitz to Himmler

To the
Reichsführer-SS H. Himmler
Field – Headquarters

Secret Command

Reichsführer!

The Chief of the medical service of the air force (Luftwaffe) is asking in the enclosed secret command document to carry out tests on prisoners in order to check two apparently promising simple procedures to make sea water drinkable.

According to your order dd. 15.05.44, Reichsführer, I obtained statements from SS-group leader Prof. Dr. Gebhardt, SS-group leader Glücks and SS-group leader Hebe. The wording is as follows:

1. SS-group leader Prof. Dr. Gebhardt:
“I consider it very important to support the air force in every possible way and to appoint a supervising internist of the Waffe SS for the tests.”

2. SS-group leader Glücks:
“With reference to the above correspondence we are informing you that there are no objections whatsoever from this end against the proposed test series in the test station Pascher [?] at the concentration camp Dachau as requested by the head of the medical service. If possible, Jews or prisoners from the quarantine station should be used.”

3. SS-group leader Hebe:
“.... illegible.

With reference to the suggestion of group leader Hebe, to carry out the tests on gypsies, I take the liberty to point out that the test results with gypsies could possibly produce test results, which might not be applicable to our men due to the partially different racial composition of those. For this reason it would be desirable if such prisoners could be used who are racially comparable to the European population.
I humbly ask your permission so that the tests can get started.

Heil Hitler!
Gravitz
An den
Reichsführer-SS H. Himmler,
Feld-Kommandostelle

Reichsführer!

Der Chef des Sanitätswesens der Luftwaffe bittet mit den in Anlage beigefügten Gkdos-Schreiben um Durchführung von Versuchen an Häftlingen zur Ueberprüfung zweier anscheinend erfolgversprechender einfacher Verfahren zur Geniessbarmachung von Meerwasser.

Ihren Befehl vom 15.5.44 entsprechend, Reichsführer, habe ich die Stellungnahmen von SS-Gruppenführer Prof. Dr. Gebhardt's, SS-Gruppenführer Gluecks und SS-Gruppenführer Hebe eingeholt. Sie haben folgenden Wortlaut:

1. SS-Gruppenführer Prof. Dr. Gebhardt:
"Ich halte es für sehr richtig, die Luftwaffe in jeder Weise zu unterstützen und für die Versuche einen aufsichtsführenden Internisten der Waffe SS zur Verfügung zu stellen."

2. SS-Gruppenführer Glücks:
"Unter Bezugsnahme auf obiges Schreiben wird mitgeteilt, dass gegen die Durchführung der vom Chef des San.-Wesens der Luftwaffe erbetenen Versuchsreihe in der Versuchsstation Rascher im K.L. Dachau von hier aus keinerlei Bedenken erhoben werden. Es sollen nach Möglichkeit Juden oder solche Häftlinge, .... die aus der Quarantäne zu entnehmen sind, verwendet werden."

3. SS-Gruppenführer Hebe:
".........illegible.

Page 14:
Zu dem Vorschlag von Gruppenführer Hebe, Zigeuner zur Durchführung der Versuche zu benutzen, erlaube ich mir den Einwand zu machen, dass die Zigeuner bei ihrer teilweise andersartigen rassischen Zusammensetzung moeglicherweise Versuchsergebnisse bringen, die auf unsere Maenner nicht ohne weiteres anzuwenden sind. Aus diesem Grunde waere es wuenschenswert, wenn fuer die Versuche solche Haeftlinge zur Verfuegung gestellt werden koennten, die rassisch der europaesischen Bevoelkerung vergleichbar sind.
Ich bitte gehorsamst um Uebermittlung der Genehmigung, damit die Versuche anlaufen koennen.
Heil Hitler!
An den
Reichsführer S.S. Himmler,

Feld- Kommandostelle

Geheime Komandossache

Reichsführer !

Der Chef des Sanitätsamtes der Luftwaffe bittet mit dem in Anlage beigefügten Gidos-Schreiben im Durchführung von Versuchen an Haftlingen zur Überprüfung zweier anschließend erfolgversprechender einfaacher Verfahren zur Gentanentzüchtung von Keimmasser.

Ihrem Befehl vom 15.6.44 entsprechend, Reichsführer, habe ich die Stellungnahme von Sgr-Gruppenführer Prof. Dr. Gehardt, Sgr-Gruppenführer Gleichs und Sgr-Gruppenführer Heilmann eingeholt. Sie haben folgenden Inhalt:

1. Sgr-Gruppenführer Prof. Dr. Gehardt:

"Ich halte es für sehr wichtig, die Luftwaffe in jeder Weise zu unterstützen und für die Vornahme eines aufsichts- und behördlichen Art der Haftlinge, wie aus der Vorgeschichte zu entnehmen sein, verwendet werden."
Zu dem Verschlag von SS-Gruppenführer Hebe, Zigeuner zur Durchführung der
Versuche zu benutzen, erlaube ich mir den Einwand zu machen, dass die Zigeu
ner bei ihrer teilweise andersartigen rassischen Zusammensetzung möglicher-
weise Versuchsergebnisse bringen, die auf unsere Maenner nicht ohne weiteres
anzuwenden sind. Aus diesem Grunde ware es wünschenswert, wenn für die
Versuche solche Maenner zur Verfügung gestellt werden konnten, die rass-
sisch der europäischen Bevoelkerung vergleichbar sind.
Ich bitte gehorsamst umUbermittlung der Genehmigung, damit die Versuche
erlaufen konnten.

Heil Hitler!

Grunds

A certified true copy
Appendix XII

[page 7,8,9]
Doc.No-409
Berlin W 15, 29.08.1942
Knesebeckstrasse 50=51

Re: Biochemical treatment of sepsis etc. with biochemical substances

To the
Reichsführer-SS H. Himmler

Berlin SW 11
Prinz-Albrechtstrasse 8

Reichsführer!

I am taking the liberty to present you with an interim report about the results achieved until this day in regard to the biochemical treatment of sepsis and other illnesses.

I. In the SS-medical hospital Dachau the following 40 cases were treated with biochemical substances. Apart from septic cases, other illnesses were treated where a substantial turn for the better could be expected with the aid of biochemistry.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phlegmonous-ulcerous processes</td>
<td>17</td>
</tr>
<tr>
<td>Sepsis</td>
<td>8</td>
</tr>
<tr>
<td>Furuncolosis and abscesses</td>
<td>2</td>
</tr>
<tr>
<td>Infected wounds after surgery</td>
<td>1</td>
</tr>
<tr>
<td>Malaria</td>
<td>5</td>
</tr>
<tr>
<td>Pleura empyema</td>
<td>3</td>
</tr>
<tr>
<td>Septic endocarditis</td>
<td>1</td>
</tr>
<tr>
<td>Nephrosis</td>
<td>1</td>
</tr>
<tr>
<td>Chronic sciatica</td>
<td>1</td>
</tr>
<tr>
<td>Gall stones</td>
<td>1</td>
</tr>
</tbody>
</table>

The following substances were applied according to the biochemical indications of biochemistry depending on the nature of the case:

Potassium phosphoricum D 6
Ferrum phosphoricum D 6 … [illegible]

<table>
<thead>
<tr>
<th>Substance</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon [?]</td>
<td>D 6</td>
</tr>
<tr>
<td>Sodium […illegible]</td>
<td>D 6</td>
</tr>
<tr>
<td>Calcium phosphoricum</td>
<td>D 6</td>
</tr>
<tr>
<td>Sodium sulfuricum</td>
<td>D 6</td>
</tr>
<tr>
<td>Magnesium phosphoricum</td>
<td>D 6</td>
</tr>
<tr>
<td>Sodium phosphoricum</td>
<td>D 6</td>
</tr>
<tr>
<td>Calcium fluoratum</td>
<td>D 6</td>
</tr>
</tbody>
</table>
The cases of sepsis were mostly set up artificially. First of all, as an interim result, it may be noted that the biochemical medication could hardly prevent any of the unfortunate outcomes of the grave illnesses. All cases of sepsis resulted ad exitum (were fatal). The cases of malaria remained completely unchanged. The biochemical treatment of cases with extensive phlegmonous-ulcerous processes, with abscess formation, pleura empyema, septic endocarditis, nephrosis, the chronic sciatica and gall stones did not even show a slightly positive influence. As far as the results were positive, according to medical experience, the course of the disease was no different than it would have been if the patients had had absolute bed rest and no special measures had been taken. The impression that the biochemical substances had a positive effect on the status of the disease could only be detected in 5 cases, 4 of which were relatively minor cases. The 5th case was a 17-day old baby with severe furunculosis. Only a few days after the beginning of the treatment there was a turn for the better. However, a mistake had been made during the setup of the experiment, i.e. at the beginning of the treatment Albucid, a sulfonamid product, had also been given. The stronger formation of pus that was obvious in some cases might have been caused by the biochemical drugs.

It might have been a result of the frequent doses of sugar, since the biochemical drugs consist mainly of pure lactose. Tests are planned to shed some more light on this.

One patient with a joint prosthesis was given sepsis drugs, potassium phosphoricum D6, because the wounds after surgery were at a severe risk of infection. Nevertheless, a fever of up to 39° developed the next day. It follows that the biochemical treatment could not prevent the onset or outbreak of infections although potassium phosphoricum D6 was administered immediately in strong doses. It should also be noted that critically ill patients in particular vigorously rejected taking the biochemical drugs after a short period of time because it was agonizing for them to take those drugs every five minutes, even at night time.

In conclusion it may be pointed out that from a total number of 40 cases, there was one positive case, and four could be rated as positive with reservations, compared to 35 failures of which 10 ended fatally. The experiments in Dachau will be continued.

Apart from the current program, the focus will be directed to a large extent on double-cases whereby one will be treated allopathically and the other one biochemically.

There were three typical sepsis cases in the concentration camp Auschwitz that had developed due to infections of the epithelium and were treated with potassium phosphoricum D4 as directed. No therapeutic effect could be detected during the course of the disease in these three cases. All three cases ended fatally.

The experiments will be continued.

Read

Signed Grawitz

Signature
Betreff: Biochemische Behandlung von Sepsis etc. mit biochemischen Mitteln.

An den Reichsführer-SS H. Himmler

Berlin SW 11
Prinz Albrechtstrasse 8
Reichsführer!

Über die bisherigen Ergebnisse der biochemischen Behandlung von Sepsis und anderen Krankheitsfällen erlaube ich mir nachfolgenden Zwischenbericht vorzulegen.


Phlegmonä-citrige Prozesse........................ 17
Sepsis.............................................. 8
Tumorkulose u. Abscesse.......................... 2
Infizierte Operationswunden...................... 1
Malorie........................................... 5
Fleurenpyan...................................... 3
Sept. Endocarditis................................ 1
Nephros.......................................... 1
Chron. I schia.................................. 1
Gallensteine..................................... 1

Zur Anwendung kamen auch folgende Heilmittel zeugen der Biochemie

je nach Lage des Falles folgende Mittel:

Kaliun phosphoricum D 6
Ferrum phosphoricum D 6 u. D 12
Silicium
Natrium uraticum
Calcium phosphoricum
Potassium sulfuricum
Magnesium phosphoricum
Potassium phosphoricum
Calcium fluoratum


Die Fälle mit ausgeprägter Malariae-sitzigen Prozessen, mit Abscessebildungen, die Pleurerevemens, die septische Endocarditis, die Nephrose, die chronische Isthmica und die Gallensteinen zeigten keine nach nur einigermaßen sicheren Einfluss der biochemischen Behandlung. Soweit sie künstig ausgingen, zeigten sie keinen anderen Verlauf, als sie noch ärztlicher Erkrankung bei absoluter Ruhestellung im Bett auch ohne besonderen Massnahmen zu nehmen pflegten.

Der Eindruck einer künstlichen Wirkung auf Krankheitszustände durch die biochemischen Mittel trat sich nur bei 5 Fällen, von denen 4 verhältnismäßig leicht geheilt waren. Bei dem 5. Fall handelte es sich um ein 17 Tage altes Kind mit schwerer Farinkulation. Hier setzte schon wenige Tage nach Beginn der Behandlung die Wendung zur Besserung ein. Allerdings ist hier in der Versuchsordnung ein Fehler insofern unterlaufen, als zu Beginn der Behandlung gleichzeitig Albusid, also ein Salizinpräparat, gegeben worden ist.

Auf Einwirkung der biochemischen Mittel ist vielleicht auch die stärkere Eiterbildung zu beziehen, die in einigen Fällen deutlich
bemerkbar war. Häufigerweise wirken sich hier die häufigen Zuckergaben durch die Tatsache aus, dass es gasförmig bestehenden biomedizinischen Tabletten aus. Versuche zu entsprechender Klärung sind eingesetzt.

Bei einem Fall von Gelenkkrebs wurde vorbeugend das Sepsismittel Kalium phosphoricum D 6 gegeben, da die Operationsswunde besonders infektionsgefährdet war. Trotzdem trat am nächsten Tage Fieber bis 39 ° auf. Die biochemische Behandlung hat also das Eintreten bzw. Ausbrechen der Infektion nicht verhindern können, obwohl sofort und intensiv das Mittel Kalium phosphoricum D 6 verabreicht wurde. Bemerkenwert ist auch, dass von allen Schwerkranken nach kurzer Zeit die Einnahme der biochemischen Tablettenenergisch abgelehnt wurde, weil es für sie eine Quälerei bedeutete, alle 5 Minuten, nach der, das Mittel einzunehmen.

Abschliessend ist zu sagen, dass bei einer Gesamtzahl von 40 Fällen eines positiven Fall und vier mit Vorbehalt als positiv zu wertenden Fällen 35 Versager gegenüberstehen, von denen 10 tödlich ausgegangen sind.

Die Erprobung in Dachau wird weiter fortgesetzt.

Neben den bisherigen Program wird das Hauptaugenmerk auf die Erfassung möglichst gleichgerichteter Doppelfälle gerichtet, von denen der eine allopathisch, der andere biochemisch behandelt werden soll.

In K.L.Schweitz wurden 3 typische Fälle von Sepsis, die sich aus Zellgewebszündungen entwickelt hatten, mit Kalium phosphoricum D 6 nach Vorschrift behandelt. In keinem dieser Fälle konnte ein therapeutischer Einfluss auf den Verlauf der Krankheit beobachtet werden, alle 3 Fälle endeten tödlich.

Die Versuche werden fortgesetzt.

gelesen: 

Ges. Geovitz

Unterschrift 5.5.42

"A certified true copy."
Appendix XIII

Problems and Complications With Cold-Water Rescue

Gordon G. Giesbrecht, PhD; John S. Hayward, PhD

From the Laboratory for Exercise and Environmental Medicine, the Health, Leisure and Human Performance Research Institute, University of Manitoba, Winnipeg, Canada (Dr Giesbrecht); and the Department of Biology, University of Victoria, Victoria, Canada (Dr Hayward)

A case description is presented of a 9-member rowing team whose scull swamped on a small lake in Victoria, Canada, because of a sudden winter storm, which immersed them in 4°C water for 50 minutes until a small rescue boat found them in darkness. Another 13 minutes of cold exposure in 6.7°C air occurred during boat transport to waiting ambulance paramedics. Two rowers died, one from severe hypothermia and the other from drowning as a consequence of cold incapacitation and hypothermia. The 2 coldest rowers, who were transported 8 km to a major hospital, arrived with rectal temperatures of 23.4°C and 25°C; the first was asystolic and the second was unconscious and in sinus bradycardia. Analysis of all the circumstances of this incident provided an opportunity to observe a continuum of responses in a heterogeneous group of rowers at risk of severe hypothermia. Several practical lessons concerning cold-water survival, rescue, and treatment can be learned. The effects of low body mass were associated with greater cooling rate. Diminished neuromuscular performance in the periphery appeared to be independent of body mass.