Grieving the Destruction of Femininity: Tracing the Loss of Menstruation in the Holocaust and Post-War Attitudes

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Consider if this is a woman,
Without hair and without name
With no more strength to remember,
Her eyes empty and her womb cold
Like a frog in winter.
Meditate that this came about: I commend these words to you.
Carve them in your hearts.

-Primo Levi, ‘If this is a Man’

Introduction

The Holocaust was one of the most horrific, inhumane, and unjust historical occurrences to date.[1] This was the state-sponsored and systematic genocide of European Jews that represented a paragon of pure evil. Non-Jewish victims of the Holocaust, such as Roma and Sinti, the disabled, homosexuals, Jehovah's Witnesses, "asocials," and political opponents, also fell victim to the hate and violence of Adolf Hitler and the National Socialist German Workers Party (Nazi Party). The concentration camp system instituted by the Nazis was a systematic process for imprisoning and unjustly killing millions of individuals who were viewed as enemies of the 'Third Reich.'[2] These victims were susceptible to the horrors of torture, abuse, starvation, forced labour, humiliation, and death. Women's experiences were also characterized by specific gendered vulnerabilities due to their biological nature.[3]

In 2021, I had the privilege of receiving a Jamie Cassels Undergraduate Research Award to complete a project for the Department of Germanic and Slavic Studies focusing on the Holocaust. For this project, I analyzed the experiences of women at the Auschwitz and Ravensbrück concentration camps to argue that they experienced the Holocaust in a specifically

[1] While the Holocaust is generally dated from 1941 to 1945, antisemitic policies trace back to the early 1930s with the rise of Adolf Hitler and the establishment of the Nazi regime. Therefore, the exact dating of the Holocaust is debated due to the gradual implementation of anti-Jewish policies. The 1935 Nuremberg Laws marked an early stage of persecution and the establishment of ghettos began in 1939 in occupied Europe once the Second World War began. The implementation of the "Final Solution" (the Nazi systematic plan for the genocide of the entire European Jewish population) and the creation of extermination camps occurred after 1941. In this thesis, women's experiences of the Holocaust in the Nazi concentration camps will be the focus, dating from 1939 to 1945. Earlier experiences in ghettos are acknowledged as important for recognizing women's gendered vulnerabilities under the Nazi regime but will not be the focus of this work.

[2] The German word Reich means empire. Germany was under the authority of the 'Third Reich' from 1933 to 1945. The Nazi Party had authority with Adolf Hitler as the supreme leader of the German people. Germany and German-occupied lands were under a totalitarian government during this time. This term is put in in quotations because it is a Nazi term used to categorize a specific time period in history.

[3] This thesis will use the term "woman" or its plural to refer to individuals born with their biological sex as female. Scholarship on transgender individuals or those identifying as non-binary is important yet overlooked in Holocaust studies. However, this thesis will be referring to individuals whose biological sex was female to understand the impact of their biological makeup, predominantly the ability to menstruate, on their experience in the Nazi concentration camp system.

gendered way. I explored four main gendered vulnerabilities: sexual violence, pregnancy and childbirth, menstruation, and dehumanization and humiliation through public nudity and head shaving. During my research, the lack of academic sources on experiences of menstruation during the Holocaust stood out to me. Despite its significance in understanding the struggles of women in the camps, the scarcity of scholarship focusing more explicitly on this topic highlights the need for further historical research.

This thesis will centre around narratives pertaining to menstruation in the concentration camps, both during the Holocaust and in the post-war period. While the majority of testimonies featured here are from Jewish Holocaust survivors, those of non-Jewish female camp survivors are also incorporated. Experiences of menstruation brought about discomfort, shame, and dehumanization. At the same time, due to the conditions of the camps, almost all women lost their menstrual cycle for at least part of their internment and experienced amenorrhea. Amenorrhea is the absence of a menstrual period for three months or more that is experienced by a woman who has previously had regular menstrual cycles. Alfred Pasternak and Philip Brooks' study of the effects of the Nazi concentration camps on 580 female Hungarian Holocaust survivors found that amenorrhea was experienced by 94.8% of these women, with 82.4% experiencing an immediate onset of the cessation of menstruation upon their incarceration. Only 0.6% of these women menstruated longer than four months after being interned.[4] These figures, though not representative of all female Holocaust survivors, offer insight into the prevalence of amenorrhea in the camps. This thesis will explore both the occurrence and disappearance of women's menstrual cycles under the Nazi camp system to illustrate how their experiences were affected by their biological ability to menstruate.

[4] Alfred Pasternak and Philip G. Brooks, "The Long-Term Effects of the Holocaust on the Reproductive Function of Female Survivors," *Journal of Minimally Invasive Gynecology* 14, no. 2 (2007): 211.

Chapter 1 will draw attention to experiences of menstruation in the camps to illustrate the difficulties, complexities, and conditions that characterize these topics. Continued menstruation in the camps included suffering from unsanitary conditions, lack of sanitary products, shame and dehumanization, and Nazi violence. Poor food and nutrition, as well as the harsh physical labour required of female camp prisoners, will also be explored to understand the context for the onset of amenorrhea. Chapter 2 will focus on the oral testimony of female camp survivors reflecting on their experiences of menstruation and amenorrhea in the camps in the post-war period. First, women's explanations for the loss of menstruation in the camps will be discussed to illustrate how women interpreted that loss. Then, the psychological and physical ramifications of enforced amenorrhea in the camps will be analyzed. Overall, this thesis is intended to emphasize the importance of understanding women's encounters with menstruation and amenorrhea in the camps in their personal understanding and experience of the Holocaust.

Due to the lack of historiography about women's experiences of menstruation in the Nazi camps, this thesis relies predominantly on primary source materials. I have focused on oral testimonies of female survivors of the camps that have been published in the online databases of the United States Holocaust Memorial Museum (USHMM). Entering the keyword 'menstruation' into the search engine of the USHMM site yields 131 entries. The sheer volume of testimonies emphasizes the importance of women's discussions of menstruation regarding their experiences of the Holocaust. I have utilized both oral and filmed interviews, transcripts, time coded notes, and interview summaries to collect information that reflects the experiences of female Holocaust victims pertaining to my thesis. In total, I have read, listened to, and watched 42 different oral testimonies of female Holocaust survivors, reflecting a large variety of experiences of menstruation in the camps. I found that male oral testimony also included

mentions of menstruation in the camps, usually in reference to a female relative, such as a sister or cousin. However, many of these sources only very briefly mention this topic and were not comprehensive enough to include in this thesis. These interviews were mainly conducted between the mid-1980s to the early 2000s, 40-60 years after the injustices of the Holocaust transpired. I have found that conversations on menstruation found their way into oral testimonies through three distinct pathways. In the first instance, the interviewer asked a basic question relating to menstruation, usually if the female survivor experienced menstruation in the camps. In this case, the interviewee provided a short and definitive answer. In the second instance, interviewers inquired about menstruation, prompting survivors to offer detailed responses and engage in conversation on the topic. In the last instance, the interviewer did not ask a question related to menstruation but the survivor brought up their experience of menstruation anyway, usually prefacing it by asking whether they were allowed to bring up what many referred to as 'women's talk.' These comments were usually not engaged further by the interviewer. The latter was the most common.

Through my research, I have found that the format and methods of questioning implicit within these interviews insufficiently address the topic in many ways. The first instance is that after the survivor confirms their experience of amenorrhea in the camps, the interviewer moves on and there is a lack of follow-up questions or discussion. In this way, women's experiences of menstruation in the camps are treated as a straightforward and unimportant aspect of the Holocaust. The second way interviewers address menstruation is by asking about the chemical bromide that many women believed the Nazis were intentionally and systematically putting in their food to cease their monthly cycles. After this was commented on, the topic of menstruation was not further inquired about by the interviewer. Overall, discussions surrounding menstruation

in interviews with Holocaust survivors tend to oversimplify the topic, lacking the focus it deserves.

I have also included material from three memoirs of Holocaust victims who address their experiences of menstruation in the camps. These include Livia Bitton Jackson's *Elli: Coming of Age in the Holocaust* (1980), Fania Fénelon's *The Musicians of Auschwitz* (1977), and Rena Gelissen and Heather Dune's memoir *Rena's Promise: A Story of Sisters in Auschwitz* (1995). These Holocaust memoirs deal with the topic of menstruation in a variety of ways. For example, they highlight the dangers of menstruation in the camps, express different explanations for the loss of menstruation, and reveal the long-term impacts of amenorrhea on their health post-war.

For the secondary source material pertaining to experiences of menstruation in the camps, I have chosen to focus on works by Sonja M. Hedgepeth, Rochelle G. Saidel, Vera Laska, Anna Hájková, Zoë Waxman and Emily Ann Wood. These scholars are all female academics who examine this topic in their work. Subjects that provoke discussion of menstruation in secondary sources encompass camp conditions, such as the lack of sanitary facilities, food and nutrition in the camps, and violence towards women. I will also be examining secondary sources that pertain to the physical ramifications, both short-term and long-term, of experiences of amenorrhea in the camps for female survivors. These include the works of Alexandra Szabó on "The Corporeal Continuation of the Holocaust: A Look at Miscarriages," Elise Bath's "Fertility in the Camps: An Exploration of Female Fertility as Reported in Concentration Camp Memoirs," Robert Waitz's "Investigation of the Aftereffects of Female Survivors' Imprisonment," Alfred Pasternak and Philip Brooks's "The Long-Term Effects of the Holocaust on the Reproductive Function of Female Survivors," and Peggy Kleinplatz and Paul Weindling's "Women's Experiences of Infertility after the Holocaust."

This thesis largely reflects feminist perspectives and methodologies. A gendered analysis is not an attempt to compare experiences to "establish a hierarchy of pain and suffering."[5] In history, looking at the distinctions between different groups is a central element that can provide different and thought-provoking perspectives. When using a gendered lens, culturally dominant and androcentric ways of categorizing what is historically important are challenged. A gendered analysis of the Holocaust has and will continue to lead to new discoveries on women's experiences.

This thesis contributes to the gap in Holocaust literature on female victims' experiences of menstruation and amenorrhea under the Nazi camp system in three main ways: through emphasizing the importance and centrality of this topic for understanding female experiences of the Holocaust, demonstrating the meaning of the loss of menstruation in the camps for female victims, and recognizing both the psychological and physical ramifications of this experience for these women. The knowledge that almost all female prisoners experienced the loss of menstruation while in the camps is not entirely missing in the existing historiography but the meaning of this is. It is my desire that this vital aspect is not forgotten and that these women's genuine experiences of one of the most inhumane historical occurrences are recognized in academic scholarship as important and legitimate topics belonging to Holocaust research.

Historiography

For at least 35 years after the Second World War, the dominant perspective in Holocaust studies was masculine. The masculine perspective was believed to encompass a universal experience. Male narratives were often substituted for women's experiences of the Holocaust,

[5] Debra Renee Kaufman, "Introduction: Gender, Scholarship and the Holocaust," *Contemporary Jewry* 17, no. 1 (1996): 4.

resulting in the erasure of women's perspectives.[6] Moreover, female survivors often edited out details of their gendered perspective in their writing, especially sexual content, due to stigma and shame.[7]

Though there was no large scholarly focus on women's experiences both during and immediately post-war, there were some outliers. Dr. Emmanuel Ringelblum studied Jewish women and children who resided in the Warsaw Ghetto from 1941-1942 and completed a comprehensive examination of ghetto family life.[8] Denise Dugurnier's 1948 study of women at Ravensbrück is another example.[9] Additionally, it must also be recognized that some women wrote about their experiences during the immediate post-war era from 1945 to 1950, though a focus on gender was limited. This historiography consisted of historical essays on life in the ghettos and camps. Many memoirs were written by women during this time, such as Olga Lengyl and Gisella Perl, Jewish doctors at Auschwitz, and Kitty Hart, an Auschwitz survivor. Most famously, Anne Frank's diary was widely published and read. Additionally, many women who played important roles in the camps and who were leaders in the Eastern European Jewish resistance movements were encouraged by Zionist and other resistance groups to record their testimonies.[10] These early memoirs of female Holocaust survivors focused on authenticity, correct dating, absence of a moralizing tone, and emphasizing the importance of female mutual assistance for survival.[11] In the late 1950s and 1960s, scholarship was semi-dormant and there were only sporadic publishings about female victims of the Holocaust, with the focus largely on

[6] Joan Miriam Ringelheim, "The Unethical and the Unspeakable: Women and the Holocaust," in *The Holocaust: Theoretical Readings*, ed. Neil Levi and Michael Rothberg (Edinburgh, Edinburgh University Press, 2003), 171.
[7] Nicole Ephgrave, "On Women's Bodies: Experiences of Dehumanization during the Holocaust," *Journal of Women's History* 28, no. 2 (2016): 15.
[8] Ibid., 115.
[9] Ibid., 116.
[10] Judith Tydor Baumel, "Gender and Family Studies of the Holocaust: A Historiographical Overview," *Women (Oxford, England)* 7, no. 2 (1996): 116.
[11] Baumel, "Gender and Family Studies of the Holocaust: A Historiographical Overview," 117.

resistance. The lack of scholarship on women's experiences was primarily due to survivors rebuilding their lives post-war, the lack of an audience, and the lack of historical awareness of the importance of gendered history.[12]

In the 1970s and 80s, there was a significant increase in works on women and the Holocaust related to two main academic trends: growth of awareness of the Holocaust and the advancement of women's studies. American scholars began looking at how gender affected experiences of the Holocaust, especially influenced by the rise of feminist movements.[13] Holocaust literature addressing gender emerged across three distinct categories during these two decades: individual memoirs, collected testimonies, and academic studies. Memoirs in this period tended to shift their focus to the distinct female experience during the Holocaust. Mutual assistance was still a key point but new topics such as Jewish women's culture became a focus and ideological and political beliefs were often left out of the narrative after an earlier focus on resistance.[14] Academic and analytical studies on women began by the mid-1970s and this was the first time that women's experiences during the Holocaust were being written by historians who were not eyewitnesses. Early researchers were largely focused on women's resources and vulnerabilities. They glorified women and idealized their strength.[15] Such scholarship included Judith Baumel's articles on women and mutual assistance in the camps, Marion Kaplan's social histories of Jewish women in pre-war Germany, and Joan Ringelheim's works on women's experiences in the camps. Ringelheim and Esther Katz were founders of the 1983 "Women Surviving the Holocaust Conference," which was the first time women's gendered experiences

[12] Baumel, "Gender and Family Studies of the Holocaust: A Historiographical Overview," 119.
[13] Marion Kaplan, "Did Gender Matter During the Holocaust?," *Jewish Social Studies* 24, no. 2 (2019): 38.
[14] Baumel, "Gender and Family Studies of the Holocaust: A Historiographical Overview," 120-121.
[15] Pascale Rachel Bos, "Women and the Holocaust: Analyzing Gender Difference," in *Experience and Expression: Women, the Nazis, and the Holocaust*, ed. E. R. Baer & M. Goldenberg (Detroit, Wayne State University Press, 2003), 27-28.

of the Holocaust were discussed in an academic forum.[16] Their aim was, first, to provide a platform for female scholars and survivors who had previously not had a voice in the scholarship and, secondly, to help academics with writing about gendered aspects of Holocaust studies. Over 400 women attended this conference and it marked a turning point in Holocaust studies that would lead to ground-breaking work on gender and its importance in Holocaust scholarship. Many female survivors were interviewed at the conference and their testimonies unveiled unique encounters tied to gender and prompted an emphasis on how women's experiences in the camps differed from men's. Sybil Milton, an American Holocaust scholar, presented her paper titled "Issues and Resources" at the conference. This paper discussed how their gender subjected women to different forms of violence than were experienced by male prisoners and how they engaged in gender-related survival techniques, such as sharing recipes.[17] Milton would later contribute a chapter titled "Women and the Holocaust: The Case of German and German-Jewish Women" to Renate Bridenthal, Atina Grossman, and Marion Kaplon's influential 1984 work *When Biology Became Destiny*. It was published a year after the conference. Milton highlighted through a feminist lens how Nazi violence targeted the biological make-up of women's bodies and the significance of studying gendered vulnerabilities for a more complete understanding of the Holocaust.[18] *When Biology Became Destiny* explores how the biological makeup of Jewish and German-Jewish women during the Nazi era predetermined their social roles and subjected them to various forms of violence.[19] While the focus was on German women, this work was

[16] Kaplan, "Did Gender Matter During the Holocaust?," 38.
[17] Emily Ann Wood, "Tracing the Destruction of Women's Bodies: Survivor Testimonies of Menstruation in the Holocaust," (MA thesis, University of New Brunswick, 2017), 19.
[18] Wood, "Tracing the Destruction of Women's Bodies: Survivor Testimonies of Menstruation in the Holocaust," 18.
[19] Renate Bridenthal, Atina Grossmann, and Marion A. Kaplan, *When Biology Became Destiny: Women in Weimar and Nazi Germany* (New York: Monthly Review Press, 1984), 13.

pivotal in emphasizing the different ways Jewish women's bodies were assaulted. Vera Laska, a Czechoslovakian survivor, also published *Women in the Resistance and the Holocaust* after the conference in 1983, providing insight through a collection of 30 biographies and memoirs of female Holocaust victims.

In the 1990s, Holocaust scholars focusing on gender were met with conservative backlash against feminism. These scholars critiqued the gendered analyses of Milton, Goldenburg, Ringelheim, and Kaplan, believing they were trying to establish a hierarchy of suffering that privileged women.[20] Academics such as Lawrence Langer and Ruth Bondy wanted to prioritize the Jewishness of victims, not view them as women, as the Nazis' goal was to exterminate the Jewish people based on their race and, in their opinion, gender did not play a role.[21] Lawrence Langer contributed a chapter to *Women in the Holocaust* edited by Dalia Ofer and Lenore J. Weitzman, entitled "Gender Suffering? Women in Holocaust Testimonies." Langer argued against a gendered perspective, stating "that nothing could be crueler or more callous than the attempt to dredge up from this landscape of universal destruction a mythology of comparative endurance that awards favor to one group of individuals over another."[22] Ruth Bondy began her Holocaust scholarship with very similar views to Langer but after extensive research, agreed with the new gender-focused direction the scholarship was taking after researching the family camp at Auschwitz-Birkenau. Bondy wrote in her later work that although the Nazis targeted the Jews as Jews, how survivors experienced violence was contingent on their gender.[23]

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[20] Dalia Ofer and Lenore J. Weitzman, *Women in the Holocaust*, (New Haven, CT: Yale University Press, 1998), 362.
[21] J. K. Roth, "Equality, Neutrality, Particularity- Perspectives on Women and the Holocaust," in *Experience and Expression: Women, the Nazis, and the Holocaust*, ed. E. R. Baer & M. Goldenberg (Detroit, Wayne State University Press, 2003), 10-11.
[22] Ofer and Weitzman, *Women in the Holocaust*, 362.
[23] Ofer and Weitzman, *Women in the Holocaust*, 311.

By the early 2000s, historians began acknowledging the importance of integrating the history of sexuality in Holocaust studies and that the acts of violence inflicted upon female prisoners were forms of gendered and sexual violence that reflected patriarchal structures. Scholars Doris Bergen, Anna Hájková, and Nicole Ephgrave have been significant in this area of scholarship. In Bergen's 2006 article "Sexual Violence in the Holocaust: Unique and Typical?," she explores the various reasons for the omission of sexual violence in Holocaust studies.[24] This foundational article not only validated the relevance of the research topic but also emphasized the necessity for scholars to grapple with the implications of gender, sexuality, and their effects within the context of the Holocaust.[25] Anna Hájková's 2013 article "Sexual Barter in Times of Genocide: Negotiating the Sexual Economy of Theresienstadt" examines how women in the Theresienstadt ghetto/camp utilized their bodies for survival by engaging in a system of sexual bartering that was another form of gender-targeted sexual oppression.[26] Lastly, Nicole Ephgrave's pioneering work in 2016 reveals how women experienced dehumanization in three specifically gendered ways. Dehumanization attacked women's bodily integrity, traditional gender roles evoked different feelings and experiences of degradation for women, and women's biological ability to reproduce left them vulnerable to sterilization, forced abortions, and infanticide.[27]

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[24] Doris L. Bergen, "Sexual Violence in the Holocaust: Unique or Typical," in *Lessons and Legacies Volume VII: The Holocaust in International Perspectiv*e, ed. Dagmar Herzog (Evanston, Illinois, Northwestern University Press, 2006), 179.

[25] Bergen argues that there are four main reasons why narratives of sexual violence have been left out of Holocaust studies. The four reasons being that sexual violence during the Holocaust has been viewed as a facet of warfare unworthy of exploration, as an inappropriate or offensive topic, as sensationalizing violent sex, and, lastly and most significantly, because it is a difficult topic to confront and understand.

[26] Anna Hájková, "Sexual Barter in Times of Genocide: Negotiating the Sexual Economy of the Theresienstadt Ghetto," *Signs: Journal of Women in Culture and Society* 38, no. 3 (2013): 506.

[27] Ephgrave, "On Women's Bodies: Experiences of Dehumanization during the Holocaust," 16.

Though many survivors refer to experiences of amenorrhea in the camps in a variety of ways, the scholarly focus has been extremely limited. There is no single recognized scholarly work dedicated entirely to the topic of women's experiences of menstruation and amenorrhea in the camps, reflecting a serious gap in the Holocaust literature. Most secondary sources, if they mention menstruation or amenorrhea, have only a small paragraph or a few sentences on the topic.[28] Scholars Sonja M. Hedgepeth, Rochelle G. Saidel, Vera Laska, Anna Hájková, Zoë Waxman, and Emily Ann Wood are the main scholars who address menstruation during the Holocaust. Hedgepeth and Saidel's work *Sexual Violence against Jewish Women during the Holocaust* discusses the inability to menstruate as a form of sexualized violence against female prisoners and recognizes the importance of menstruation for women.[29] They also cite several oral testimony sources. Laska's work, *Women in the Resistance and in the Holocaust: The Voices of Eyewitnesses*, discusses the consequences of menstruating in the camps.[30] Hájková's article "Medicine in Theresienstadt" examines the gynecological research of Dr. František Bass, who researched the effects of amenorrhea on female prisoners.[31] Waxman's "Concentration Camps" is a 2017 article that cites multiple oral testimonies of female victims and their experiences with menstruation in the camps, largely focusing on the difficulties associated with it.[32] The most recent addition to this scholarship is a 2019 Master's thesis by Emily Ann Wood titled "Tracing

[28] The book *Blood: The Science, Medicine, and Mythology of Menstruation* by Dr. Jen Gunter, a Canadian-American gynecologist and author, is an example of the growing interest of the subject of menstruation in other academic fields.
[29] Sonja M. Hedgepeth and Rochelle G. Saidel, *Sexual Violence Against Jewish Women During the Holocaust* (Waltham, MA: Brandeis University Press, 2010), 81.
[30] Vera Laska, *Women in the Resistance and in the Holocaust: The Voices of Eyewitnesses* (Westport, Conn: Greenwood Press, 1983), 75. Laska recalls a disturbing personal memory of a shower, where a menstruating woman was kicked by the Nazi guards for "dirtying" the floor.
[31] Anna Hájková, Medicine in Theresienstadt," *Social History of Medicine: The Journal of the Society for the Social History of Medicine* 33, no. 1 (2020): 1-27. Dr. Bass concludes that the physical stress of the camp environment led to widespread amenorrhea among female prisoners.
[32] Zoë Waxman, *Women in the Holocaust: A Feminist History* (Oxford: Oxford University Press, 2017).

the Destruction of Women's Bodies: Survivor Testimonies of Menstruation in the Holocaust" which is the first substantial work to focus on experiences of menstruation in the Holocaust.[33] Wood highlights the gap in literature on this topic, as well as its importance for understanding the experiences of female victims. Wood's pioneering work has been instrumental in the completion of this thesis by validating the significance of this historical subject for study and by serving as a source for relevant oral testimony.

[33] Wood, "Tracing the Destruction of Women's Bodies: Survivor Testimonies of Menstruation in the Holocaust," 19.

Chapter 1: Experiences of Menstruation in the Camps

Unsanitary Conditions

The living conditions prisoners faced in the Nazi concentration camps were immensely unsanitary. Upon arrival to most of the camps, prisoners were disinfected, shaved, and stripped of their clothing.[34] They received only one uniform composed of a jacket, pants, and a cap (typically made from a striped blue and white, coarse material) and uncomfortable wooden clogs or shoes made of thin material. No underwear or other undergarments were given to prisoners. The clothing was usually ill-fitting, provided little protection from the elements, and contributed to discomfort and the spread of diseases. The articles were usually lice-ridden and served as the uniform prisoners had to wear while engaging in demanding physical labor outdoors in dirty conditions, as well as for sleeping. For anyone, this would be extremely unhygienic. However, for menstruating prisoners, the lack of available clothing to change into presented an extra burden. Mária Janšáková, a former inmate of the Ilava Detention Camp in the wartime Slovak state, describes how "a woman's existence is more fixed to the question of underwear and clothing" due to their biological ability to menstruate.[35] Overcrowding was also a major issue in the barracks, where prisoners lived and slept. These barracks were made of wood and were neither insulated nor ventilated. Moreover, there were no bathrooms or sewage systems in the barracks. To compensate for this, a small bucket would usually be used for urine and excrement. Holocaust survivor Rosa Nissenholz describes in her testimony how the conditions of the

[34] Certain supposedly sanitary measures in the camps, such as head shaving and disinfection were completely inadequate for preventing any disease and were offset due to the overall unsanitary conditions of the camp that prisoners were forced to live in.

[35] Denisa Nešťáková, Katja Grosse-Sommer, Borbála Klacsmann, and Jakub Drábik, *If This Is a Woman: Studies on Women and Gender in the Holocaust* (Brookline, MA: Academic Studies Press, 2021), 112.

Bergen-Belsen concentration camp in Germany were "hell on earth."[36] People died by the thousands each day and there was only a small amount of cold running water for cleaning. Needless to say, insect pests, such as fleas and lice, easily spread amongst the prisoners in these cramped and dirty conditions. Diseases like dysentery and typhoid were common. Many female testimonies describe the inability to clean themselves due to the lack of sanitary facilities as well as the difficulties this presented. Showers were not an option. Carol Steinhardt, who was deported to Auschwitz, recounts her memory of trying to stay clean to avoid diseases:

> Well, you had to keep yourself clean; otherwise, you had lice and whatever. So we went to the toilets, whatever water kept running there, we did wash ourselves off. But the toilet conditions were terrible, you know, it was an awful thing. But if we got to some water or even during the snowy season we would take a little bit snow, and we would let it stand in our [bowl] or whatever we had. And we had some water, we kept washing ourselves.[37]

Doris Rauch, a prisoner at Theresienstadt in the wartime Nazi Protectorate of Bohemia and Moravia, describes how the dirty conditions contributed to the spread of disease in the camps in her oral testimony: "They had brushes and [we] used them for cleaning all the time, but it was impossible to get the barracks clean. Fleas and lice were everywhere. People got typhus from lice."[38] Holocaust survivor Eugen Kogon's book, *The Theory and Practice of Hell: The German Concentration Camps and the System behind Them,* corroborates these accounts with his chapter on the environment in several Nazi concentration camps. He too describes how unsanitary

[36] Rosa Nissenholz, "The United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview, United States Holocaust Memorial Museum, June 1982.
[37] Carol Stern Steinhardt, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Joan Ringelheim, United States Holocaust Memorial Museum, 3 June 1996.
[38] Doris Rauch, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Gail Schwartz, United States Holocaust Memorial Museum, 7 July 1995.

conditions played a role in the spread of diseases and contributed to the degradation and dehumanization of prisoners.[39]

Many female oral testimonies also refer to the dehumanization they felt due to the camp bathrooms. Hana Bruml recalls that the toilets were actually just "benches with holes in them" at Auschwitz.[40] Blanka Rothschild, who survived Ravensbrück women's camp, describes the bathrooms and their distance from the sleeping quarters:

> There was no sanitation. We did not have latrines. There were holes with [wood]- there was a wooden board with two holes, and since many of us were sick from whatever they gave us to eat, it was a constant walk to the latrines, to the holes. There was tremendous degradation of human beings. It was the human spirit [that] suffered more than the physical spirit. Our bodies didn't listen to us, didn't obey us.[41]

Moreover, the Nazis limited access to these inadequate facilities by forcing strict schedules upon prisoners. Auschwitz survivor Judy Freeman remembers that access to the toilet occurred only in the early morning before roll call and after the end of the work day, with ten to fourteen hours in between.[42] The lack of adequate bathroom access would have provided yet another challenge for menstruating women.

The harrowing living conditions endured by those in Nazi concentration camps were marked by extreme unsanitariness. The lack of durable and clean clothing, infestation of lice, overcrowded and poorly ventilated barracks, absence of sanitary facilities, and the rampant spread of diseases created an environment of unimaginable suffering, degradation, and

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[39] Eugen Kogon, *The Theory and Practice of Hell; the German Concentration Camps and the System behind Them* (New York: Octagon Books, 1973).
[40] Hana Bruml, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Linda G. Kuzmack, United States Holocaust Memorial Museum, 27 February 1990.
[41] Blanka Rothschild, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Sandra Bardley, United States Holocaust Memorial Museum, 27 September 1994.
[42] Judy Freeman, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive, Gift of Joan Ringelheim," Interview conducted by Joan Ringelheim, United States Holocaust Memorial Museum, 25 May 1982.

dehumanization for those interned in the Nazi camps. For women experiencing menstruation, the lack of available clean clothing, inability to wash themselves, and limited bathroom access presented an even greater challenge of dealing with their menstrual cycles while in the dirty, disease-ridden, and cramped camp conditions. The profound impact on the physical and mental well-being of the individuals subjected to such conditions is evident in their accounts.

Lack of Sanitary Products

In addition to the unsanitary conditions of the camps, the absence of sanitary products, such as menstrual pads, presented a problem for women experiencing their monthly cycles. Individuals being transported to concentration camps were usually allowed to pack one bag or suitcase of essential items, such as clothing, food, precious keepsakes, and important documents. Many women arriving at the camps brought sanitary products with them, understanding that they would have their menstrual cycles wherever they were going. Some of these women were menstruating at the time of their deportation and, thus, needed to bring these items with them. Additionally, many women packed sanitary products for their expected personal needs during the duration of their stay in the camps. Unfortunately, sanitary napkins were confiscated by the Nazi guards upon arrival. Holocaust survivor Olga Issenberg recounts how the Nazis took away her sanitary napkins at Auschwitz:

> It's pretty hard to talk about it. Like we came into Auschwitz, the first thing they cut off our hair. They gave us a dress. Here I am menstruating and I'm – and they take away all my napkins. Now, you ask them, 'please, give me some.' To which the Camp guards responded, 'don't worry about [it].'[43]

[43] Olga Issenberg, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive, Gift of Jewish Family and Children's Services of San Francisco, the Peninsula, Marin and Sonoma Counties," Interview, United States Holocaust Memorial Museum, 11 April 1983.

Gerda Schild Hass discusses how female sanitary products were considered "contraband" in Theresienstadt:

> Well contraband- another new expression- was for us anything they didn't allow for Jews to possess- lipstick, money, cigarettes, chocolate, even female napkins- anything like that was called contraband. As a matter of fact, anything that belonged to a Jew was not allowed to belong to him, so most everything was contraband.[44]

Vera Laska's book *Women in the Resistance and in the Holocaust* mentions that at Buchenwald, the 'Health Supervisor,' Fraulein Bassa, was a sadist whose callousness was manifested by denying women sanitary napkins, which women new to the camps still needed.[45] Without products to alleviate the effects of menstruation, female prisoners were forced to free-bleed. The removal of sanitary products by the Nazis was a gendered form of humiliation that prevented female victims from having control over their bodies.

In dealing with the lack of menstrual products available to them, women looked for anything they could find in the camps to stop their bleeding. Prisoners were allowed no personal belongings in the camps and only had one change of clothes. Thus, cloths, rags, scraps of newsprint, and anything else that could be found was used. On top of this, the dirty camp environment presented another obstacle for finding something applicable to stop blood flow. In *Rena's Promise*, a memoir of two sisters in Auschwitz, Rena Gelissen speaks openly about having her period and the challenges of this:

> I scour the ground for anything that might help me hinder the flow. There is nothing . . . I return to the block toilet, I take a few squares of newsprint. Wiping them against my trousers to make sure they're clean, I shudder. Then, without thinking any further about it, I crumble them up and place the newspaper between my legs. I spend the day

[44] Gerda Haas Schild, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Joan Ringelheim, United States Holocaust Memorial Museum, 12 September 1995.
[45] Laska, *Women in the Resistance and in the Holocaust: The Voices of Eyewitnesses*, 19.

> completely self-conscious, afraid of what getting my period means in this place . . . Dealing with this curse means praying that it will go away quickly and never return.[46]

Rena's Promise exhibits the feelings of the young camp prisoner being terrified of blood soaking through her clothing. This is representative of the feelings and attitudes of many female Holocaust victims who experienced their menstrual cycles in the camps. Another female prisoner, Trude Levi, depicts her experience in Auschwitz of having her period with nothing to stop her from free-bleeding:

> We had no underpants, nothing to keep the blood from dripping on to our legs or on to the ground. That was the ultimate degradation and it was the last menstrual period many of us had in camp. The body does not waste reproductive energy on starving humanity in severe shock.[47]

In the camps, normal physiological developments for women, such as menstruation, became sources of psychological discomfort, emotional distress, and physical torment.[48] The lack of sanitary products made a very private female experience public, as women were forced to free-bleed and worry about stopping their blood flow with limited available materials. Historians Elizabeth Bauer and Myrna Goldenberg conclude that the Holocaust "successfully reduced the functions of the female body to a burden and a curse."[49] Due to the lack of sanitary products, bloody clothing was another reality for menstruating women in the camps. Bruml describes her first and only experience menstruating in the camp and how this affected her ability to keep her clothing clean:

> If I may, so . . . at that time, this was the last time I had . . . was menstruating for many months; uh because, you know, we lost menstruation. And I very carefully washed out the pants, very carefully; but, of course, I couldn't hang them. I couldn't do anything with

[46] Rena Kornreich Gelissen and Heather Dune, *Rena's Promise: A Story of Sisters in Auschwitz* (Boston: Beacon Press, 1995), 75.
[47] Waxman, *Women in the Holocaust: A Feminist History*, 94.
[48] Elizabeth Roberts Baer and Myrna Goldenberg, *Experience and Expression Women, the Nazis, and the Holocaust* (Detroit: Wayne State University Press, 2003), 186.
[49] Ibid.

> them, because they would be stolen immediately. So I carefully folded them and held them under my arm. Between my arms they would dry a little bit. And then I would fold them the other way and hold them for my . . . under my arm for about three days, hoping they would be clean and would be dry because my body warmth would dry them.[50]

It is clear that the absence of sanitary products available to female prisoners in the Nazi camps presented distinct challenges that were gendered in nature. Lacking autonomy over their bodies, women were compelled to resort to whatever was available to halt the bleeding, frequently having to utilize items that were unclean and unsanitary as substitutes. Women were forced to free-bleed onto themselves and their clothing. The lack of menstrual products forced female prisoners who were menstruating to experience a humiliating and dehumanizing struggle to maintain their dignity and basic hygiene in the challenging environment of the camp.

Nutrition and Diet

Many survivor testimonies emphasize the lack of food in the camps and experiences with extreme hunger and thirst. In most camps, prisoners were given three extremely inadequate meals a day. In the morning, half a liter of coffee or boiled water with a grain-based coffee substitute or tea was distributed for the breakfast meal. At noon, prisoners received a liter of soup which contained a variety of vegetables and grains, such as potatoes, rutabaga, groats, and rye flour. However, it lacked substance and was extremely watery. In the evening, a bread ration of 300 grams with 25 grams of protein or fat, such as sausage, margarine, or cheese, would be given. The evening meal was intended to serve as both dinner and breakfast, yet most prisoners consumed it immediately due to their severe hunger. As is evident, the food had an extremely low nutritional value. The food lacked protein, as well as vitamins, and fats. At Auschwitz, for

[50] Bruml, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," 27 February 1990.

example, the food ration was approximately 800-1500 calories per day.[51] Doriane Kurz, who survived Bergen-Belsen camp as a child, recalls her experience with food rations:

> Most of the time during the day, [my brother's] and [I's] time was spent talking about food because there was not very much to eat and we were hungry all the time . . . In Belsen the rations were three quarters of a liter of watery soup made from a variety of turnip . . . and three and a half centimeters of bread a day.[52]

Additionally, with a limited food supply, Nazi victims were forced to perform harsh physical labour daily, exhausting their bodies. For women, the reality of poor food and nutrition in the camps was one of the main causes of their loss of menstruation. Lack of food is a scientifically recognized cause of amenorrhea, due to the inadequate intake of substances to support the menstrual cycle. Therefore, the onset of widespread amenorrhea for female prisoners was partly the result of Nazi brutality through forced starvation.

Shame & Dehumanization

Experiences of menstruation in the camps were characterized by shame and dehumanization. The degradation of these experiences due to the camp conditions was immense, forcing women to struggle to conceal and ease the effects of their menstrual cycles. On top of this came the long history of menstruation being shameful in nature for women due to societal perceptions. Biblical laws even refer to the uncleanliness of menstruating women (Leviticus 15:24). Needless to say, many women refer in their oral testimonies to feelings of shame and humiliation as a result of their inability to maintain basic cleanliness in the camps and being

[51] Memorial of Auschwitz-Birkenau, "Nutrition," Nutrition / Life in the camp / History / Auschwitz-Birkenau, 2022, https://www.auschwitz.org/en/history/life-in-the-camp/nutrition/ (accessed 15 January 2024).
[52] Doriane Kurz, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Linda G. Kuzmack, United States Holocaust Memorial Museum, 10 July 1990.

forced to bleed in public settings. A word that comes up very often in regards to menstruation is the term "mess." During her interview, Anna Maxell Ware spoke of how the loss of menstruation was a blessing due to the lack of sanitary facilities at Auschwitz-Birkenau:

> I really think it was a blessing because I just cannot [imagine] thousands of women without any sanitary facilities having their periods . . . What amazed me was that really, it was almost like a miracle that we didn't menstruate because it would have been a big, big mess.[53]

Carol Steinhardt, who was interned at Auschwitz, recalls how amenorrhea was welcomed because it became easier for the women to keep themselves clean.[54] Again, there is an association the female prisoners made between their periods and mess.[55] The connection between uncleanliness and menstruation forced women to view their bodies and its natural processes extremely negatively, effectively leading to their dehumanization.

Nazi Cruelty Towards Menstruation

One of the most distressing aspects of women's experiences of menstruation in the camps was the reality of Nazi violence and cruelty towards menstruating prisoners. As discussed above, due to the lack of both sanitary facilities and products available, female prisoners were forced to free-bleed in public settings. This brought not only humiliation and shame but also fear of punishment. In *Rena's Promise,* the author captures the profound impact of menstruation in the context of Nazi oppression and grapples with the intense fear surrounding the onset of one's cycle in this hostile environment: "I spend the day completely self-conscious, afraid of what

[53] Anna Maxell Ware, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Arwen Donahue, United States Holocaust Memorial Museum, 1-4 April 1996.
[54] Steinhardt, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," 3 June 1996.
[55] Additional accounts detailing experiences of menstruation in Nazi concentration camps employing the term "mess" are available from Judith Isaacson and Olga Zeleny on the United States Holocaust Memorial Museum online database.

getting my period means in this place. Dealing with this curse means praying that it will go away quickly and never return."[56] Livia Bitton-Jackson, a survivor of Auschwitz, similarly recounts her fear of menstruation and the inability to do anything about it upon noticing a fellow prisoner menstruating:

> All at once I notice that blood is flowing on the legs of the girl before me. A thick red stream of blood on the inner side of each leg. She is menstruating. Poor girl. Of course, we have no underwear . . . there are no pads . . . the blood simply flows. Down her legs. My God, but this is horrible . . . Why doesn't she say something? Ask for a pad or something? But from whom? Whom can she say anything to? She might even be shot for reporting that she is bleeding. Does menstruating constitute sabotage?[57]

The public visibility of menstruation among female prisoners provided Nazi guards with justification for violence, despite this being a circumstance imposed by the camp conditions. Small things, like a blood spot on clothing, was reason enough for a prisoner to be beaten.[58] In her memoir *The Musicians of Auschwitz*, Fania Fénelon remembers women who were beaten by the Blockhovas in charge of the barracks if they were menstruating and then being forced to clean up the blood.[59] In extreme cases, some women were shot if they were seen to be menstruating.[60] Another danger menses presented was that menstruating women were more likely to be selected for 'medical' experimentation upon their arrival to the camps.[61] Oral testimony detail the abuse at the hands of the Nazis towards menstruating women. Emilie Danielova, who was imprisoned at Auschwitz, recounts how she was kicked by a Nazi guard for

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[56] Gelissen and Dune, *Rena's Promise: A Story of Sisters in Auschwitz*, 75.
[57] Elise Bath, "Fertility in the Camps: An Exploration of Female Fertility as Reported in Concentration Camp Memoirs," *German Life and Letters* 72, no. 4 (2019): 544.
[58] Ingrid Lewis, *Women in European Holocaust Films Perpetrators, Victims and Resisters* (Cham: Springer International Publishing, 2018), 60.
[59] Fania Fénelon and Marcelle Routier, *The Musicians of Auschwitz* (London: Joseph, 1977), 94.
[60] Waxman, *Women in the Holocaust: A Feminist History*, 94.
[61] Bath, "Fertility in the Camps: An Exploration of Female Fertility as Reported in Concentration Camp Memoirs," 545.

bleeding, which caused her to bleed even more: "One German kicked me in the genitals, Lord God . . . For no reason; he kicked me for no reason and I started bleeding." Her experience is illustrative of the lack of protection available for menstruating prisoners and its physical consequences. Vera Laska exposes the depths of degradation and cruelty experienced by women in the camps. She remembers in Auschwitz-Birkenau that the Nazis subjected a group of women to a humiliating ordeal in the shower area, where they were forced to undress while guards leered at them. One woman in particular was experiencing her monthly cycle and due to her nakedness and lack of underwear, there was blood running down her legs. The Nazis saw this blood and physically beat the interned woman in front of her fellow prisoners for "messing up" the bathroom floor.[62] It is clear that violence towards menstruation was a gendered vulnerability that epitomized the dehumanizing nature of Nazi oppression towards female prisoners. As a result of Nazi violence, women were forced to associate fear with their bodies' natural cycle. The testimonies and narratives presented shed light on the unimaginable suffering endured by menstruating prisoners, who faced not only physical torment but also psychological anguish due to their biological ability to menstruate.

[62] Laska, *Women in the Resistance and in the Holocaust: The Voices of Eyewitnesses,* 176.

Chapter 2: Women's Conceptions of Amenorrhea in the Post-War Period

Liberation from the Nazi concentration camp system resulted in the return of menses for most female victims. No longer were their menstrual cycles predominantly characterized by unsanitary conditions, lack of sanitary products, poor nutrition and diet, shame and dehumanization, and Nazi brutality. However, upon reentering a life in freedom and attempting to rebuild their lives, many female camp survivors continued to face ramifications due to the loss of their period. Their experiences would be marked by specific psychological and physical effects that continued long after amenorrhea stopped. This chapter evaluates the impact of amenorrhea on female survivors of the camps and the various ways in which they recognize its impact on their lives post-war.

The Return of Menstruation

To highlight the impact of forced amenorrhea on female survivors and the various ways in which they conceptualize the effects on their lives post-war, it is important to begin by recognizing the significance of the return of menstruation. In many testimonies, survivors were able to recall the specific moment they regained their menstrual cycles. Survivors usually remembered the month, year, location, and their feelings upon its return. This memory of the return of menstruation represents the key link between women's biological capacity to menstruate and their experiences in the Nazi camps.

Sally Abrams was liberated in 1944 after having spent an entire year imprisoned first in the Lodz ghetto and then in Auschwitz and Bergen-Belsen camps. She recollects the return of her period a few short months after leaving Bergen-Belsen and arriving in Sweden:

I don't know how I survived, really, it's unbelievable. First of all, they put [chemicals] in

> your food . . . You don't know if you are [a] woman . . . Everybody lost [their] period from the shock. I . . . didn't menstruate for as long as I was in concentration camp and when I came to Sweden, it took a few months until [my period] came back to . . . normal.[63]

Rachel Gordon spent time in the Stutthof camp located in the German-annexed Free City of Danzig. On recalling the return of her menstrual cycle, Gordon remembers "When we went in the labor camps concentration camp none of us had the period. None of them. And then when [I] came to Berlin after [a] few weeks or more to say normalized [surroundings] we had."[64] Gordon's period came back a couple of weeks after the war when she travelled to Berlin. For Abrams and Gordon, menstruation was a sign of the return to normalcy.

Amy Z. Gottlieb, a Jewish Englishwoman, dedicated much of her life to supporting Jewish refugees both during and after the war. In 1943, she joined the international organization Jewish Relief Unit of the Jewish Committee for Relief Abroad, sponsored by the Central British Fund for German Jewry, which was a charity focused on relief work to help Jews impacted by the Holocaust in Europe. Gottlieb recalls the joyful news of women's menstruation returning among the displaced persons camps (DP camps) in Germany, where she was working:

> It was wonderful for us when [the women in the DP camps] first started to get pregnant, because while they were incarcerated or in hiding, most women didn't even menstruate. They only started to menstruate again when they were free. It's an interesting phenomenon how nature takes care of itself.[65]

Indeed the return of menstruation for women who had been imprisoned in concentration camps was cause for celebration. This emphasizes the disruption the Nazi camp system had on

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[63] Sally Abrams, "United States Holocaust Memorial Museum Collection, gift of the Gratz College Holocaust Oral History Archive," Interview, United States Holocaust Memorial Museum, 13 October 1981.
[64] Rachel Gordon, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive, Gift of Jewish Family and Children's Services of San Francisco, the Peninsula, Marin and Sonoma Counties," Interview, United States Holocaust Memorial Museum, 7 November 1990.
[65] Amy Zahl Gottlieb, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Joan Ringelheim, United States Holocaust Memorial Museum, 9 June 1999.

every aspect of female prisoners' lives, including their biological functions. Menstruation signified the return of these women's bodies and their normative biological functions after the dehumanizing conditions of the camps. Additionally, it represented that their reproductive capabilities and fertility had been restored.[66]

Explanations for Amenorrhea

In understanding the impact of the loss of menstruation on female prisoners, it is important to consider how these women conceptualized what happened to them. As previously stated, amenorrhea was a condition experienced by almost all women in the camps. This was likely a combination of poor nutrition, harsh physical labour, and extreme shock and trauma from the conditions of the camps. These are all scientifically recognized explanations for amenorrhea and were likely the reason for this loss. However, some female prisoners postulated different explanations for the loss of their menstrual cycle both at the time and after their liberation. It is also important to note that some women did not know why they experienced amenorrhea in the camps and provided no explanation.[67]

The most common explanation for amenorrhea was chemical bromide that the Nazis were thought to have been administering to prisoners. Referred to as 'brom' in oral testimonies, there were rumours in the camps that the Nazis were using this substance to systematically stop the menstrual cycles of female prisoners. Brom was described as a white, powdered chemical substance that was dissolved in the coffee or soup rations. In most testimonies, this subject came up when interviewers inquired if women continued to get their menstrual period while in the

[66] See the oral accounts of Renee Duering, Cecilia Einhorn, Leah Henson, Anna Szyller Palarczyk, and Anna Maxell Ware for further exploration of the resurgence of menstruation after the war among female Holocaust survivors on the online database of the United States Holocaust Memorial Museum.
[67] See Barbara Gerson's testimony in the United States Holocaust Memorial Museum online database.

camps. Many survivors were quick to highlight how they did not because of the bromide that was added to their food. Dora Freilich, who survived Auschwitz-Birkenau, replies to her interviewer that she did not get her period in the camp because "[the Nazis] put stuff in the food that took the menstruation away right away."[68] Some prisoners, like Alice Jakubovic, describe seeing the bromide in their food rations at Auschwitz:

> They [the Nazis] brought us all supper . . . We couldn't eat it, because we felt something in the food. But then we [learned] that it was a sedative, bromide, or brom, and we couldn't eat it. But it was good, it was useful for us, because we stopped [having] menstruation for three years, we didn't have menstruation with these sedatives.[69]

Jakubovic discusses the bromide in positive terms, as it stopped the challenges of experiencing menstruation in the camps. Some women also recall the distinct smell of the bromide, such as Barabara Farkas, who was detained at Auschwitz: "The food had some kind of smell. There, after that, we found out that they put some bromide in the food to make [sure] that the woman [didn't] have [their] period. And I didn't have [my] period [any]more that…year."[70] It is clear that many women believed chemical bromide was being put into their food by the Nazis, even attributing the texture or smell of their rations to this. This rumour is so well documented in oral testimony that some interviewers bring the topic up themselves. In Susan Spatz's testimony, she is asked outright "was there something in the food?" after describing her loss of menstruation at Auschwitz-Birkenau.[71] Moreover, there is evidence supporting the bromide hypothesis. Lilly

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[68] Dora Freilich, "United States Holocaust Memorial Museum Collection, Gift of the Gratz College Holocaust Oral History Archive," Interview conducted by Helen Grassman, United States Holocaust Memorial Museum, 24 October 1984.
[69] Alice Jakubovic, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Joan Ringelheim, United States Holocaust Memorial Museum, 27 August 2002.
[70] Barbara Marton Farkas, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Linda G. Kuzmack, United States Holocaust Memorial Museum, 27 April 1990.
[71] Susan Spatz, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive, Gift of Jewish Family and Children's Services of San Francisco, the Peninsula, Marin and Sonoma Counties," Interview, United States Holocaust Memorial Museum, 13 April 1983.

Malnik, a Belgian survivor of Auschwitz, worked in the camp kitchens for five months in 1944 and reported that packets of light pink chemicals were dissolved into the food rations.[72] Malnik recounts how the kitchen staff were forced by female guards to add these packets to the soup rations that were only given to female inmates. The packets of light pink chemicals apparently had the texture of wet, kosher salt. Scholar Jean Jofen's study on the long-term effects of medical experiments in concentration camps (1969) found in interviews with kitchen staff at Auschwitz that they were instructed to put chemicals in women's soup from receptacles labeled "I.G Farben," which was a major industrial German chemical company that manufactured Zyklon B, the poisonous gas used in the gas chambers of Nazi death camps.[73] Jofen's analysis is that the chemicals were a hormone designed to induce amenorrhea and infertility. It is probable that scholars will never ascertain whether chemical bromide was administered in the food of female prisoners. However, it is important for understanding how female victims explained their loss of menstruation to themselves. Thus, this speculation remains a notable aspect in discussions surrounding amenorrhea and warrants attention.[74]

Physiological explanations, especially malnutrition and trauma, also come up in oral testimony and are the second most common explanation for amenorrhea in the camps. Malnutrition is the most prominent physiological rationale. Blanka Rothschild, who was interned at Ravensbrück, blames the lack of nutritious foods for the cessation of her period:

[72] Lilly Malnik, Personal Communication, (2 June 2022), quoted in Peggy J. Kleinplatz and Paul Weindling, "Women's Experiences of Infertility after the Holocaust," *Social Science & Medicine (1982)* 309 (2022): 4.
[73] Jean Jofen, *Long-Range Effects of Medical Experiments in Concentration Camps:The Effect of Administration of Estrogens to the Mother on the Intelligence of the Offspring*, World Union of Jewish Studies (1972), quoted in Kleinplatz and Weindling, "Women's Experiences of Infertility after the Holocaust," 4-5.
[74] See the oral testimonies of Barbara Artman, Margit Kirsche, Lenore Lichtman, and Eva Slonim on the United States Holocaust Memorial Museum online database for more discussion of the use of chemical bromide in the Nazi concentration camps to cease menstruation.

> The food we were given was, of course, of no nutritional value, no value whatsoever. It was watery soup, one slice of bread . . . All of us stopped menstruating because we had no nutrition in our bodies. We started to resemble skeletons.[75]

Ana Vinocur also cites malnutrition: "Hunger was severe. All women stopped menstruating until after the war."[76] Beyond the physical, oral testimonies offer some psychological explanations for the cessation of menstruation. During her time at the Grünberg concentration camp, Rosa Nissenholz attributed the cessation of menstruation to trauma and shock. She recalls upon her arrival at the camp, having her mind go blank and not being able to remember anything about how she got there or why she was there:

> From the first day on, your mind went [blank]. You stopped thinking. I don't recall ever thinking to myself why I am here? How did I get here? And what happened? I was in such a shock and I think everybody else was. We were such young girls . . . We were all about 15, 16, 17. But somehow it was a tremendous psychological shock to not only our minds but to our whole system. I must tell you that in four year . . . to explain what kind of shock this was to everyone. None of the girls had their monthly periods, which was a blessing, believe me.[77]

Betti Frank, a survivor of Auschwitz, provides a thought-provoking testimony that not only offers a psychological explanation for amenorrhea but discounts the hypothesis of chemical bromide.[78] On being asked the reason for the onset of widespread amenorrhea in the camps, Frank states that the women did not know why, though many believed the Nazis were putting

[75] Rothschild, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," 27 September 1994.
[76] Ana Vinocur, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview. United States Holocaust Memorial Museum, 17 October 1991.
[77] Nissenholz, "The United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," June 1982.
[78] Betti Frank, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive, Gift of the Gratz College Holocaust Oral History Archive," Interview, United States Holocaust Memorial Museum, 3 March 1991.

something in their food. She herself believes it was a psychological reason, though she does not elaborate.

A distinction must also be made for the women in the camps who continued to get their periods. This was the reality for a small minority who were entitled to certain privileges. At Auschwitz, Cecilia Einhorn remembers how women who got better food or were Kapos in charge of the barracks still got their period.[79] Helen Tichauer, who worked in the camp office at Auschwitz and was also a member of the women's orchestra, continued menstruating while interned, even on a death march. She discusses how for the first fourteen months in the camp she experienced amenorrhea, until she began receiving better rations due to her job and got her period back.[80] Contrarily, for some women, it was not due to having a better position in the camp system that they retained their period. Irene Shapiro had no special privileges but continued menstruating at Auschwitz-Birkenau, while working for a Krupp munitions factory. This left her with conflicting feelings:

> I got out of the typhus-barracks . . . menstruating and looking so well that the Germans were asking me, where have you been, at a resort? This is what I mean, survival of the fittest, I wanted to survive. I must have been endowed with some survival genes which unfortunately doesn't serve me right now.[81]

Shapiro remembers her desire to survive, yet the presence of menstruation in the camps posed a significant obstacle to her chances of survival. In general, female prisoners attributed their experiences of amenorrhea in the camps to either chemical bromide or physiological factors,

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[79] Cecilia Einhorn, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview, United States Holocaust Memorial Museum, 12 November 1984.
[80] Helen Spitzer Tichauer, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Joan Ringelheim, United States Holocaust Memorial Museum, 7 September 2000.
[81] Irene Shapiro, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Anthony DiIorio, United States Holocaust Memorial Museum, 27 March 1992.

such as malnutrition or trauma. Some women also continued to have their periods in the camps, but this was not the majority.

Psychological Ramifications

Experiences of amenorrhea took a psychological toll on female prisoners in the camps. There are two main ways this is discussed in oral testimony. Some female Holocaust survivors express emotions like happiness and joy that they felt upon losing their periods. Others convey the sadness and worry they underwent due to a sense of the loss of femininity. Though amenorrhea was a near universal experience in the camps for female prisoners, the psychological ramifications of this were encountered differently. These emotions represent the complexity of these experiences for women and a need to refrain from generalizations.

Many women describe a positive correlation between the cessation of menstruation and their well-being in the camps. The most common emotions or descriptors associated with amenorrhea in this instance are "happiness," "joy," "luck," and loss of menstruation as a "blessing." Survivors Rosa Nissenholz, Doris Rauch, and Helen Waterford all use the term "blessing" in their testimony to describe their experiences with amenorrhea.[82] Rauch describes how losing her period was a blessing due to the inability to find supplies to protect herself from free-bleeding.[83] Gita Taitz and Cecilia Einhorn both refer to their loss as "lucky." Einhorn states: "Nobody was menstruating . . . And it was out of luck . . . or something."[84] Annie Bleiberg

[82] Nissenholz, "The United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," June 1982; Rauch, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," 7 July 1995; Helen Waterford, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Linda G. Kuzmack, United States Holocaust Memorial Museum, 14 November 1989.
[83] Rauch, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," 7 July 1995.
[84] Cecilia Einhorn, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview, United States Holocaust Memorial Museum, 12 November 1984.

recalls how in Auschwitz "the women lost their period, which was in a way good because they had no way to take care of it."[85] The terms female survivors use to describe their emotional state upon the cessation of their cycles emphasize relief due to the horrors of experiencing one's cycle in the camps.[86]

Comparatively, other women recall negative emotions, namely sadness and worry. The conditions of the camps took away the dignity of all prisoners but for women, this was experienced in a specifically gendered way through the loss of femininity. The loss of hair due to compulsory head shaving, the reduction of body fat in places that typically demarcate a woman, such as the hips and breasts, and the loss of menstruation are all examples of this. As survivor Erna Rubinstein describes:

> What is a woman without her glory on her head, without hair? A woman who doesn't menstruate? We had lost our dignity in Auschwitz. We had no clothes that looked feminine and no desire to act like ladies . . . Some said that we would lose our womanhood completely.[87]

Many women echo these same feelings in their testimonies in specific relation to amenorrhea. Carol Steinhardt draws a direct correlation between the loss of her menstruation and the loss of her femininity: "We did not have our periods, you know. So we were not women."[88] Equating menstruation with womanhood, Steinhardt underscores the symbolic significance of this natural bodily function in defining her sense of identity as a woman. Similarly, Zophia Shulman describes the loss of femininity she experienced while interned in a camp at Biesdorf, near

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[85] Annie Bleiberg, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive, Gift of Hannes Ravic for BILD TV," Interview conducted by Hannes Ravic, United States Holocaust Memorial Museum, 2014.

[86] See the oral testimonies of Susan Spatz, Anna Maxell Ware, and Helen Waterford on the United States Holocaust Memorial Museum database for more discussion of positive reactions of female prisoners to the onset of amenorrhea in the camps.

[87] Ephgrave, "On Women's Bodies: Experiences of Dehumanization during the Holocaust," 21.

[88] Steinhardt, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," 3 June 1996.

Berlin. Shulman asserts that female prisoners had a more difficult time with self-image than male prisoners:

> We lost our femininity because . . . we had no menstrual periods. Due to malnutrition . . . And so we had no breasts, we had no appearance, we had no looks . . . Men had it a little easier, although the men did suffer as much as we did. But [with] self-image . . . when we came out of the war, we really had a very hard time. We lost five years of our lives. How to dress, who are we?[89]

Shulman's testimony is an unfortunate example of the long-term psychological ramifications forced amenorrhea in the camps had on female prisoners. The experience of Itka Zygmuntowicz is another example of how the loss of femininity affected a woman's psyche. Zygmuntowicz recalls her feelings of shock when she looked at herself in the mirror after her time in Auschwitz. She not only did not recognize herself but also saw no signs of her womanhood staring back at her:

> During [my time in]] Auschwitz I didn't get my period . . . And I didn't know if I [was] going to be like a normal woman. And when I saw myself in the mirror, I started to scream. The nurses didn't know [what had] happened. And I didn't know how to explain.[90]

Zygmuntowicz's description of the emotional reaction to the loss of femininity she experienced while interned at Auschwitz is an extremely distressing account of what was a reality for many women in the camps. Helen Waterford was also taken aback by the physical transformations brought about the environment of Auschwitz-Birkenau, including her cessation of menstruation:

> Probably the most upsetting was this being changed into a different person with losing your hair, losing everything you had, just as you are born, I think that was the greatest shock. You couldn't see yourself, but you saw the others, so you knew what you were looking like. I think it was the greatest shock for all of us, because nobody menstruated

[89] Zophia Shulman, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive, acquired from Jewish Family and Children Services of San Francisco, The Peninsula, Marin and Sonoma Counties," Interview, United States Holocaust Memorial Museum, 11 April 1983.
[90] Itka Zygmuntowicz, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Randy M. Goldman, United States Holocaust Memorial Museum, 30 May 1996.

> anymore. That was over. And . . . young girls . . . were upset because they were not menstruating.[91]

All these women's testimonies highlight the profound psychological impact amenorrhea had on their experiences in the camps. Beyond its physical implications, amenorrhea represented either a blessing or a curse that manifested as the loss of femininity for survivors. For many female prisoners, the loss of menstruation led to self-image complications and disconnection from their bodies. By depriving them of a fundamental aspect of their womanhood, amenorrhea exacerbated feelings of dehumanization and disempowerment within the already oppressive camp environment.

Physical Ramifications

Many female survivors discuss the physical ramifications of their experiences in the camps in connection to amenorrhea. This highlights the enduring effects of Nazi violence towards female bodies post-liberation. The most common physical effects that appear in oral testimony are both the delayed return and onset of menstruation, medical intervention required to regain menstruation, and infertility.

The late return of menses after liberation was a confusing and anxiety-inducing ordeal for many survivors who had already endured excessive trauma and loss. In most cases, it takes approximately three to six months for the return of menstruation after experiencing amenorrhea.[92] Factors including age, weight, physical activity and genetics all play a role in how long it takes to regain one's period. However, for some female camp survivors, it took much

[91] Waterford, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," 14 November 1989.
[92] Cleveland Clinic Medical, "Hypothalamic Amenorrhea: Causes, Symptoms & Treatment," Cleveland Clinic, 2022, https://my.clevelandclinic.org/health/diseases/24431-hypothalamic-amenorrhea (accessed February 13, 2024).

longer for their natural cycles to come back. Anna Maxell Ware did not get her period back until her arrival in New York in February of 1946. Ware was liberated from Bergen-Belsen by the British in April, 1945. Therefore, it took approximately ten months for Ware to regain her menstrual cycle:

> After I was arrested for the, the second time, and put in the prison while we were waiting to be transported to Bergen-Belsen, I was [supposed] to have my menstrual period which I did not get and I didn't menstruate all through the ordeal until . . . after I came to New York. That's about all.[93]

Mania Kohn was twenty-three when she was interned at Auschwitz. She reveals that she was amenorrheic for many years after liberation: "We were given bowls for our watery black soup. In the soup was a pill to stop our menstruation. I did not have my period for several years until after freedom."[94] Kohn does not state exactly how long it took to regain her cycle but it seems likely that it was more than two years, reflecting a lengthy period of time. For both Ware and Kohn, it is clear that the effects of amenorrhea continued in their post-war lives.

There are also testimonies from women who experienced the delayed onset of their period. These were young girls who had arrived at the camps before experiencing menarche. Dorrit Ostberg was a young Jewish girl of twelve to thirteen when she was interned at an Italian camp. During her interview, she is directly asked if she menstruated on time, given the traumatic experiences she went through as a child. Ostberg replies that she did not menstruate for the first time until the age of eighteen. This is considered an unusual case, as the majority of biological

[93] Ware, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," 1-4 April 1996.
[94] Mania Kohn, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview. United States Holocaust Memorial Museum, 16 July 1985.

females experience their first menses between the ages of ten to fourteen, with the average age being twelve. On her late onset of menstruation, Ostberg recalls:

> My menstruation didn't start [until] I was 18, even past 18. When I got married at 19, I didn't menstruate for six months after that, and my mother-in-law . . . was dancing around that I was pregnant, but I was not. And . . . it was never okay . . . the only time it got regulated is after I had my son. After that I had no more [problems].[95]

Not only did she not get her period until she was eighteen but Ostberg also experienced an irregular cycle until the birth of her first child. She equates her irregular cycle to a "problem," underscoring the challenging effects of amenorrhea on her menstrual cycle. Upon her arrival to New York, Ostberg remembers feeling like her experiences in the camps had set her back in life and that she felt the need to "catch up" with society: "I didn't feel older, but I remember when I first got to New York, I remember distinctly thinking, I stood still while the rest of the world went on, and I have to catch up to it." Having her first period at eighteen caused Ostberg to experience normative events in female development later than her peers, causing her physical affliction coupled with emotional distress. Regina L. Gelb was also a young girl when she was interned at Ravensbrück. Liberated at sixteen, she did not have her first period until she was also eighteen:

> Some women stopped menstruating. I personally never started. Of course I was too young. I never started. I wasn't developed, I was flat like a board and I never menstruated, not [until] . . . two years after the war . . . Everybody was saying that I had nothing to worry about, since I never started, I wouldn't start it in Auschwitz for sure, because there was [chemical bromide] in the food.[96]

[95] Dorrit Ostberg, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Gail Schwartz, United States Holocaust Memorial Museum, 29 July 2000.
[96] Regina Laks Gelb, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Regine Beyer, United States Holocaust Memorial Museum, 18 March 1998.

Both Ostberg and Gelb are examples of women who did not menstruate in the camps but experienced the delayed onset of menarche. The disruption of menstruation due to the horrors of the Nazi regime is evident in their testimonies.

In some more extreme cases, women experienced severe disruptions to their menstrual cycles after the war. Margot Kirsch is one such individual who continued to menstruate while she was pregnant. Kirsch did not know she was pregnant for five and a half months into her pregnancy because of this. Her experience reflected a severe health complication and irregularity. In her testimony, Kirsch attempts to come to terms with this medical anomaly, stating: "I knew something was different with me, but it was not really visible, or I don't know if I can go into medical terminology here. Menstruation wise, I was still menstruating too, so I did not know that I was pregnant."[97] Helen Farkas is another woman who experienced a severe medical issue post-war regarding her menstrual cycle and had to seek medical treatment. After escaping a death march from Bergen-Belsen in 1945, Farkas returned to her hometown in Romania to begin rebuilding her life. In her interview with the USHMM, she recalls how her sister regained her menstrual cycle a few short months after the war but she did not. Farkas attended multiple appointments with doctors and underwent various medical therapies. She credits an injection she received as the reason she finally got her period back.[98] It is evident that the physical ramifications of amenorrhea continued even after women regained their periods in the post-war period.

[97] Margot Kirsche, "United States Holocaust Memorial Museum Collection, Gift of Council for Relationships," Interview, United States Holocaust Memorial Museum, 06 March 1995.
[98] Helen Farkas, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive, Gift of Jewish Family and Children's Services of San Francisco, the Peninsula, Marin and Sonoma Counties," Interview, United States Holocaust Memorial Museum, 13 September 1990.

Infertility is another topic that comes up in survivor testimony with regards to the aftereffects of amenorrhea on female survivors. In many female testimonies, fertility and reproduction anxieties are highlighted. In the memoir *Elli: Coming of Age in the Holocaust*, author Livia Bitton-Jackson recalls her loss of menstruation at Auschwitz and Dachau camps as a young girl of thirteen. Bitton-Jackson voices the fears about future reproductive ability that women in the camps were expressing: "Married women keep wondering . . . will they bear children again? What will their husbands say when they find out?"[99] Helen Bromberg spent five years in five different camps, finally being liberated from Bergen-Belsen by the British. After the war, Bromberg met and married her husband and then immigrated to America in 1947. Despite a loving marriage, Bromberg and her husband were unfortunately never able to conceive, despite their attempts. In her interview, Bromberg remembers how long it took for menstruation to come back to female survivors and her own struggles with fertility post-war: "I remember it took for some ladies two, three years with good nourishment and with good food and they became back ladies, and maybe this is one of the reasons I have no children."[100] As is evident from her testimony, Bromberg makes a direct connection between her experience of amenorrhea in the camps and her inability to have children post-war. Helen Farkas was twenty-five upon liberation from Auschwitz and struggled to conceive for many years until 1958 when she was 38 and successfully gave birth to her daughter. She never menstruated again after 1958, so was unable to have more than one child.[101] These three accounts illustrate the challenges faced by female

[99] Livia Bitton Jackson, *Elli: Coming of Age in the Holocaust* (New York: Times Books, 1980), 103-104.
[100] Helen Bromberg, "The United States Holocaust Memorial Museum, the Jeff and Toby Herr Oral History Archive, acquired from Jewish Family and Children's Services of San Francisco, the Peninsula, Marin and Sonoma Counties," Interview conducted by Elena Schulman, United States Holocaust Memorial Museum, 20 February 1989.
[101] Farkas, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive, Gift of Jewish Family and Children's Services of San Francisco, the Peninsula, Marin and Sonoma Counties," 13 September 1990.

Holocaust survivors after the war, grappling with infertility and issues conceiving, which they attribute to their time in the camps.

This subject matter is accompanied by an array of secondary literature. Since the late 1990s, there has been an interest by both Holocaust scholars and those who work in scientific fields to study the medical science of the Holocaust. Additionally, a handful of academics have focused on the long-term effects of the Holocaust on women's fertility post-war. In addition to discussing the oral testimony of survivors, it is important to review the scholarly literature to try and grasp the complexity of this topic in regards to female Holocaust experiences.

Alexandra Szabo's article "The Corporeal Continuation of the Holocaust: A Look at Miscarriages" (2020) analyzes the low rates of childbirths in Hungary from 1945 - 1949 and concludes that the damages incurred to women's reproductive systems due to the physical and psychological effects of the Holocaust seem to be a significant reason for this. Szabo analyzed sixteen testimonies from the Visual History Archive of the USC Shoah Foundation and found that seven female survivors mentioned experiencing a miscarriage after liberation.[102] Peggy Kleinplatz and Paul Weindling's study "Women's Experiences of Infertility after the Holocaust" reviews 93 testimonies gathered from telephone interviews with Holocaust survivors on their reproductive histories. They found that 98% of the women they interviewed were unable to conceive or carry to term their desired number of offspring.[103] Comparatively, Alfred Pasternak and Philip G. Brooks examined 580 female Hungarian survivors of the Nazi camp system in their study "The Long-Term Effects of the Holocaust on the Reproductive Function of Female Survivors." They conclude that though there were changes in short-term menstrual function,

[102] Alexandra M. Szabó, "The Corporeal Continuation of the Holocaust: A Look at Miscarriages," *The Hungarian Historical Review* 9, no. 3 (2020): 418.
[103] Kleinplatz, Peggy J., and Paul Weindling. "Women's Experiences of Infertility after the Holocaust." *Social Science & Medicine (1982)* 309 (2022): 1.

there were little to no long-term physical ramifications in reproductive functions, such as abortions, stillbirths, or other pregnancy complications.[104] Thus, there is no scholarly consensus on the physical ramifications of the Holocaust on women's reproductive capabilities.[105] However, what is known is that many women express infertility concerns post-war in relation to their experiences in the concentration camps.

One male testimony from the USHMM also explores the fertility issues of female camp survivors. Though he was not himself a victim, David Klebanow was a Russian obstetrician at Munich University Hospital after the war and studied the aftereffects of the camps on the health and fertility of women. In his interview, he discusses his findings. He noticed greater genital abnormalities and sterility issues and higher rates of miscarriage among women who had survived the camps. Klebanow even published a paper sent to the leading journal for obstetrics and gynecology in Germany at the time. On discussing the contents of this paper, he recalls:

> Then I published [an addition] to this paper. Not only malformations, but we have sterility problems. Women who were previously fertile, now they [could not] become pregnant. Women who- young women- [could not] become pregnant at all. They . . . they become pregnant, many [had] miscarriages. And it is not only one problem, it is a problem. How long it will last, I don't know. But it still lasts.[106]

Klebanow emphasizes the scientific reality of the corporeal effects of the Holocaust on women's reproductive abilities post-war.

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[104] Pasternak and Brooks, "The Long-Term Effects of the Holocaust on the Reproductive Function of Female Survivors," 211.

[105] For more sources on the physical effects of the Holocaust regarding the Nazi concentration camp system on the reproductive health of female prisoners, see Elise Bath's article "Fertility in the Camps: An Exploration of Female Fertility as Reported in Concentration Camp Memoirs" (2019) and Robert Waitz's "Investigation of the Aftereffects of Female Survivors' Imprisonment" (1961).

[106] David Klebanow, "United States Holocaust Memorial Museum Collection, the Jeff and Toby Herr Oral History Archive," Interview conducted by Linda G. Kuzmack, United States Holocaust Memorial Museum, 7 December 1989.

While there is no scientifically proven consensus on the physical effects of the Nazi camp system of female reproductive capabilities, the testimonies and secondary sources above provide valuable insight. Despite the inability to draw an incontrovertible conclusion, it is still significant to represent women's perceptions of their experiences and the connection they draw between amenorrhea in the camps and fertility issues post-war.

To end this section, it is important to note that many female survivors also did not experience any physical ramifications due to having amenorrhea in the camps. In the cases of many women, they regained their periods shortly after liberation and did not have any long-term effects. Cecilia Einhorn was interned at Auschwitz and menstruated for the first time again a few weeks after liberation. For Holocaust survivor Anna S. Palarczyk, it took three months for her period to come back. However, it cannot be disregarded that many women experienced minor to severe physical ramifications post-war that they connect to the loss of their menstrual cycles.[107]

[107] See the oral testimonies of Dora Freilich and Rachel Gordon on the United States Holocaust Memorial Museum database for more discussion of the 'normal' return of menstruation.

Conclusion

As has been made clear, experiences of menstruation in the Nazi concentration camps brought extreme discomfort, shame, and dehumanization for female prisoners. Menstruation was a specific gendered vulnerability that affected women's experiences. Due to the camp environments, the majority of women lost their menstrual cycles for at least part of their internment, experiencing amenorrhea. This thesis has examined both the occurrence and disappearance of women's menstrual cycles in the camps to illustrate how female Holocaust victims' experiences were significantly affected by their biological ability to menstruate. This has been done in two parts. Firstly, the experiences of menstruation in the camps have been investigated to show how unsanitary conditions, lack of sanitary products, food and nutrition, shame and dehumanization, and Nazi violence towards menstruation were all factors that influenced both women's experiences of menstruation and the onset of amenorrhea. Secondly, the multiplicity of experiences of amenorrhea was examined through post-war oral testimony. These accounts outlined various explanations for amenorrhea, as well as the psychological and physical ramifications of the loss of menstruation.

Moreover, this thesis has sought to contribute to the gap in Holocaust literature regarding women's experiences of menstruation and amenorrhea in the Nazi concentration camps in three main ways: by highlighting the critical relevance of this subject in comprehending female experiences during the Holocaust, by elucidating the significance of the loss of menstruation for female victims in the camps, and by acknowledging the profound psychological and physical impacts this experience had for survivors. The relevance of menstruation for female experiences of the Holocaust has been demonstrated through the first chapter on experiences of menstruation in the camps. Three key areas were identified in which the camp environment made menstruation

an extremely uncomfortable and degrading experience: the unsanitary conditions of the camps, the lack of sanitary products, and Nazi violence towards menstruation. Additionally, the significance of the onset of amenorrhea in the camps is acknowledged in the post-war testimonies of female survivors. The many explanations postulated for the loss of menstruation and the various emotional reactions to this loss, both happy and sad, illustrate the significant impact amenorrhea had on female victims and the complex ways in which survivors acknowledge its meaning for themselves. The multifaceted psychological and physical ramifications of amenorrhea for survivors in the post-war period are outlined in the second chapter. Psychologically, the significance of amenorrhea is revealed by the remembrance of the specific moment of the return of menstruation, as well as the loss of femininity that stayed with many survivors. Physically, the delayed return and onset of menstruation, medical intervention required to regain menstruation, and infertility are expressed in oral testimony as experiences of amenorrhea that continued long into the post-war period for many survivors. These three objectives work together to acknowledge the significance and validity of menstruation and amenorrhea as subjects in Holocaust research and other academic domains.

As research on this topic is in the beginning stages, areas for further study are abundant. More research will need to be done especially on the post-war ramifications of the loss of menstruation in the camps. Additionally, the topic of female fertility post-war is one of interest. Survivors also cite the loss of fertility through invasive and forced 'medical' experimentation and compulsory sterilization in the Nazi camps through their testimony.[108] These areas also have limited scholarly research.

[108] See Zoë Waxman's article "Concentration Camps" in *Women in the Holocaust: A Feminist History* (2017), especially pages 94-98.

This thesis reflects the personal experiences of female Holocaust survivors through the lens of menstruation and amenorrhea. It is significant that oral testimony be the focal point. While concrete evidence regarding phenomena such as the use of chemical bromide in prisoners' food or post-war infertility due to prolonged amenorrhea remains elusive, it is still crucial to recognize those who include it in their accounts, by viewing it as an integral aspect of their Holocaust experience. This thesis has placed the testimony of 42 female survivors at the centre, to acknowledge the complexity of the experiences of women who faced the harrowing conditions of the concentration camps. By focusing on the experiences of female Holocaust victims, individual experiences can be heard and generalizations can be avoided.

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