



2018 HAWAII UNIVERSITY INTERNATIONAL CONFERENCES  
ARTS, HUMANITIES, SOCIAL SCIENCES & EDUCATION JANUARY 3 - 6, 2018  
PRINCE WAIKIKI HOTEL, HONOLULU, HAWAII

# FRANCES OLDHAM KELSEY, THALIDOMIDE AND THE QUEST FOR GOOD SCIENCE IN THE NUCLEAR AGE

WARSH, CHERYL KRASNICK PhD. FRSC  
DEPARTMENT OF HISTORY  
FACULTY OF ARTS & HUMANITIES  
VANCOUVER ISLAND UNIVERSITY  
NANAIMO, BRITISH COLUMBIA  
CANADA

Prof. Cheryl Krasnick Warsh PhD FRSC  
Department of History  
Faculty of Arts & Humanities  
Vancouver Island University  
Nanaimo, British Columbia  
Canada.

**Frances Oldham Kelsey, Thalidomide and the Quest for Good Science in the Nuclear Age**

**Synopsis:**

Dr. Frances Oldham Kelsey, Canadian-born pharmacologist, was, in the early 1960s, one of the most famous women in North America. Kelsey blocked approval of a popular European sedative, Kevadon (Thalidomide) from entering the U.S. market, saving potentially thousands of American babies from horrific birth defects. This paper analyzes a sample of the thousands of letters she received from the public.

## Letters to Dr. Kelsey:

### Thalidomide and the Quest for Good Science in the Nuclear Age

Thalidomide epitomized Bad Science in 1962.<sup>1</sup> Along with the ongoing existential threat of nuclear proliferation and radioactive fallout from Atomic Bomb tests, and the publication of excerpts of Rachel Carson's *Silent Spring* in *New Yorker* magazine, describing the toxicity of chemical pesticides, the little pink tranquilizer from a West German pharmaceutical company, confirmed, for many Americans, that unchecked, unregulated science was a menace to their individual families, as well as to the planet

---

<sup>1</sup> This study is based upon the Frances Kelsey holdings at the Library of Congress, Washington, D.C., and interviews with Dr. Frances Oldham Kelsey, Christine Kelsey and Susan Duffield. Other sources include Linda Lear, *Rachel Carson: Witness for Nature* (Boston: HMH, 2009); Daniel Carpenter, *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA* (Princeton University Press, 2010); Stephen R. Weart, *The Rise of Nuclear Fear* (Cambridge, Mass: Harvard University Press, 2012); Clarence Karr, *Authors and Audiences: Popular Canadian Fiction in the Early 20<sup>th</sup> Century* (Montreal: McGill –Queen's University Press, 2000); Charlene Simmons, "Dear Radio Broadcaster: Fan Mail as a Form of Perceived Interactivity," *Journal of Broadcasting and Electronic Media*, 53, 3: 449. Recent worthy contributions to the history of Dr. Kelsey and the Thalidomide story in Canada include Christine Chisholm, "The Curious Case of Thalidomide and the Absent Eugenic Clause in Canada's Amended Abortion Law of 1969," *Canadian Bulletin of Medical History [CBMH]* 33, 2, 2016: 493-516; Denyse Baillargeon et Susanne Commend, "'Unmédicament 'monstrueux': débats publics et couverture médiatique de la tragédie de la thalidomide au Canada, 1961-1963," *CBMH* 33, 1 (2016): 131 and the upcoming William Kaplan, *Why Dissent Matters: Because Some People See Things the Rest of Us Miss* (Kingston and Montreal: McGill Queen's University Press, 2017).

itself.<sup>2</sup> The nuclear threat was not overcome, nor was global environmental poisoning. Yet the fight against thalidomide had a heroine, whom her employer (the FDA), the American government, and an international public were quick to identify as an exemplar of Good Science.

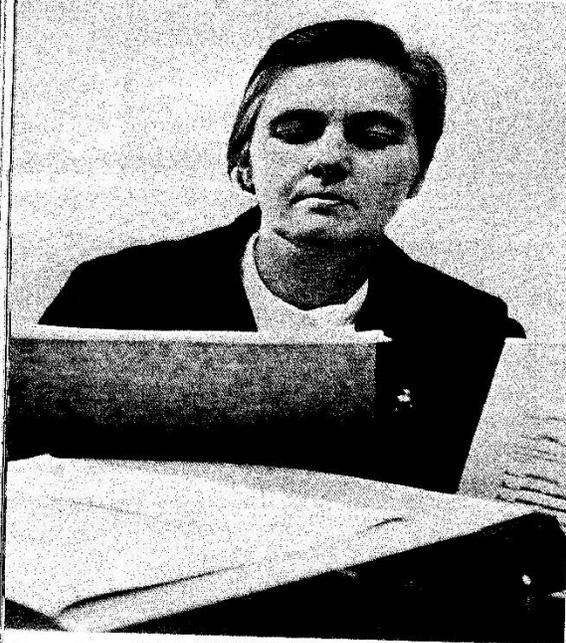
Thalidomide was developed by the Grunenthal pharmaceutical corporation in 1953. Introduced to the West German market in 1957 as a sleeping pill, it became very popular for both adults and children. It apparently was so innocuous, it was sold without a prescription. Thalidomide also prevented nausea in pregnancy, so many women with severe morning sickness took the drug. On September 12, 1960, thalidomide's American distributor, William S. Merrell Company, applied to the FDA to approve the drug for the U.S. market. Because Merrell included glowing reports about the drug's use in Europe, it was considered to be a routine New Drug Application (NDA), and the FDA assigned the file to its newest medical officer, Dr. Frances Oldham Kelsey.

---

<sup>2</sup> Linda Lear, *Rachel Carson: Witness for Nature* (Boston: HMH, 2009), 411-12. Thanks to Linda Lear for the reference.

# A WOMAN DOCTOR WHO WOULD NOT BE

by JOHN MULLIKEN



**CAREFUL DOCTOR.** Before deciding whether thalidomide should be approved for sale, FDA's Dr. Kelsey pored over volumes of reports, blocked general distribution of drug, probably saving thousands of U.S. babies from deformity.



**MEDICAL SLEUTHS.** Chicago Health Commissioner Samuel Anderson (left) sits pills rounded up from doctors in area. German Physician Wido Kindler (above) gave the first alarm in a Düsseldorf speech in late 1961.

The application was submitted by the William S. Merrell Co., an old Cincinnati drug firm. When it arrived on Dr. Kelsey's desk in the form of three blue- and black-bound folders, each the size of a telephone book, it seemed routine enough. Merrell was asking the Food and Drug Administration to evaluate and license a drug called thalidomide which they wanted to market by prescription, under the trade name Kevadon. From all accounts the perfect sleeping pill. The folders contained Merrell's complete laboratory, clinical, pharmaceutical and animal testing data, and because of thalidomide's resounding success in Europe the firm wanted to get it on the U.S. market.

For Frances Kelsey, a pharmacologist, physician and mother of two daughters, the application seemed even easier than routine to process. But she knew her job was to move cautiously and watch for that 10th chance in 10 that the drug might be unsafe. As she began to read the contents of the folders, Dr. Kelsey became uncomfortable. "There was something a little different about this one," she explains, "so it seemed better to be safe and sure." The drug did not, for example, have the same effect on animals; they were put to sleep by it. Dr. Kelsey knew she had to start from scratch—to treat thalidomide as though it had never been used before.

As part of the application procedure Merrell had already sent the drug out to American doctors—the number eventually reached 1,200—for testing. This was standard drug firm procedure, permitted by law even though the new drug was unlicensed. Most of these doctors, not required by law to explain to their patients that the drug was still experimental, were favorable in their reports—the drug was safe and effective, as Merrell pointed out. The company also noted the drug's European success, but Dr. Kelsey was not impressed. "We cannot check back on foreign research," she said, "and therefore we cannot rely on foreign documentation."

Under the 1938 Food and Drug Act, Merrell would have been able to market Kevadon if it had not heard from Washington within 60 days after its application for licensing. Now, to keep Kevadon out of U.S. drugstores, Dr. Kelsey wrote to the Merrell company and told them that their evidence was "incomplete."

From that moment the struggle between the "stubborn bureaucrat" and the company was joined. "They came to Washington, it seemed, in droves," Dr. Kelsey recalls. "They wrote letters and they telephoned—as often as three times a week. They telephoned my superiors and they came to see them too." Company officials complained that Dr. Kelsey was being unreasonable and irresponsible. After all, the drug was being used in every civilized country. "Most of the things they called

me you couldn't print," she says. While company men were voicing their opinion of Dr. Kelsey to her superiors, her division boss, John Hauser, decided to hold fast. "When they got too thick around Dr. Kelsey," says Hauser, "I would just close in with my little hatchet and clear them out." While this kind of blocking was most welcome, it could not prevent Dr. Kelsey from reading editorials like the one that appeared in a bi-weekly magazine sent to doctors, the *Medical World News*, castigating the FDA for "... dietary factors which certainly cause a loss to the industry of millions of dollars ... and even loss of life."

Under this intensive pressure, Dr. Kelsey kept writing letters to Merrell telling them that the information in the application was still incomplete. Then in February 1961 she discovered the first item that confirmed her new 6-month-old suspicions. Buried in the letters column of the *British Medical Journal* was a note from a reader which warned that reports had been drifting in to a company marketing thalidomide in England of "a possible toxic hazard with the sedative drug..." and there were "... signs suggestive of peripheral neuropathy in patients receiving thalidomide for periods of six months or more."

Over the next few months other cases were reported. There were strong indications that the drug caused numbness, shaking, tingling of hands and other motor and sensory disturbances. Dr. Kelsey was not jubilant, for this was not that kind of victory. She was simply relieved to know that she was right.

The Merrell company, meanwhile, though unconvinced that the drug was toxic, had sent investigators to check out the British reports. Their findings were inconclusive; no clear connection, they insisted, had been established between thalidomide and the neuropathy cases. For one thing the rate of incidence, then one in every 3,000 cases, was too slim to compare. For another, the company speculated they were showing up mainly in old people who probably were badly fed and had vitamin deficiencies. Dr. Kelsey tried to understand Merrell's attitude. "It must be a lot different when you have invested in developing a drug. I guess they and I differ on how important the safety of a drug which is issued in a fairly trivial fashion must be." She argued that anything which was handled out as easily as the Germans had distributed Contergan (their name for thalidomide) could, in the U.S., be passed from one neighbor with a prescription to another neighbor without one with out second thoughts or warnings.

The company then asked Dr. Kelsey if she would approve the drug if they attached a label announcing that it might cause certain reactions. Late in October, they were reminding her that if she did not have her verdict they would "miss the Christmas market." Dr. Kelsey refused to budge. She wrote a letter every time.

Dr. Kelsey, born in Cobble Hill, Vancouver Island, British Columbia, was from a rural, yet privileged background. Her father was a retired British Naval officer, and her mother's family was wealthy, well-educated Scottish gentry. Frances, or 'Frankie,' enrolled at age fifteen in the Science programme at Victoria College, then the feeder school for McGill University, where, in 1935 she graduated with a B.Sc. and M.Sc. She undertook doctoral studies in pharmacology with one of the leading figures in the nascent field, Dr. E.M.K. Geiling at the University of Chicago, where she met her future husband and collaborator, fellow pharmacologist Fremont Ellis Kelsey. When, in the 1940s, they were informed that the University of Chicago would not employ a married couple, Frances and Ellis flipped a coin, and as she recalled, "I lost" and entered the medical school, from which she graduated in 1950. Frances worked as an editorial assistant for the *Journal of the American Medical Association*, and when Ellis was appointed to a position at the University of South Dakota, they moved to Vermillion, where Frances worked as a locum practitioner, taught pharmacology at the university, and raised two young daughters. In 1960, through the recommendation of their mentor, Dr. Geiling, the two Kelseys were hired in Washington, Frances at the FDA's Bureau of Medicine, and Ellis at the National Institute of Health.<sup>3</sup>

Dr. Kelsey was part of the 'new wave' of highly educated, specialized government employees, and her team at the FDA included other chemists and pharmacologists.

---

<sup>3</sup> Carpenter emphasizes the point, as Kelsey herself and the FDA did, that she was part of a team that used new professional standards in vetting the Kevadon application. This point is often missed in the heroic narrative that ensued of a woman alone against the powerful pharmaceutical corporation. See Carpenter, *Reputation and Power*, *passim*.

They meticulously vetted Merrell's NDA, and found serious deficiencies in the data. Dr. Kelsey asked for more testing, and representatives of Merrill, which had five tons of thalidomide in American warehouses ready to sell, were anxious to have the drug passed. While delaying the approval, Kelsey undertook a literature review and learned of serious side effects experienced by European thalidomide users, and further delayed a decision. She also related the symptoms to earlier research she had undertaken at the University of Chicago, where quinine was found to be toxic to fetuses. Merrill underplayed or dismissed Kelsey's concerns, and during the spring and summer of 1961, company representatives "came to Washington, it seemed, in droves." Kelsey recalled, "They wrote letters and they telephoned – as often as three times a week. They telephoned my superiors and they came to see them too... Most of the things they called me, you wouldn't print."<sup>4</sup>

By November, Merrill informed Kelsey that thalidomide was being withdrawn from the German market because of reports of serious congenital abnormalities in children of users; the abnormalities included children born without arms and legs, with their hands and feet growing directly from their torsos. Others were born with cardiac problems, and many more were stillborn. An estimated 8,000 to 80,000 thalidomide babies were born in Europe, the discrepancy in numbers due to internal defects which could not be legally traced to consumption of the drug.

Dr. Helen Taussig, one of America's leading obstetricians, visited Europe shortly after the first thalidomide cases were reported, and, upon her return, delivered speeches warning about the drug, and how a similar tragedy had been averted in the U.S.

---

<sup>4</sup> J. Mulliken, "A woman doctor who would not be hurried." *Life*, 53, 1962: 28-9.

Although some reporters understood the magnitude of her findings, there was little national press for it. At the same time, Tennessee Senator Estes Kefauver was trying to revive his bill on drug safety regulations, which would strengthen the powers of the FDA, but which had languished in Congress for lack of interest on the part of both Houses and President Kennedy. When one of Kefauver's aides read Taussig's speech, he 'leaked' the story to the Washington Post, where the editor, recognizing its potential significance, gave it to a scrappy sports reporter, Morton Mintz, to write. Mintz's front-page story, hailing Dr. Kelsey as the stubborn scientist who saved the American public, was instantly picked up by all of the major newspapers and news services. The Kefauver-Harris bill was unanimously passed by both Houses, and Kennedy jumped on the bandwagon by hastily including Dr. Kelsey in the upcoming ceremony for a President's Award for Distinguished Federal Civilian Service. The snapshot of Dr. Kelsey receiving the medal from President Kennedy also received national, as well as international coverage, and cemented her position as one of the most famous women of 1962.

Frances Kelsey's limelight has been described as "perhaps the most intensive and positive experienced by any female federal official in the history of the United States... To the mass public, Kelsey appeared as a cerebral and maternal protector of sorts – quiet, unassuming, brilliant but circumspect."<sup>5</sup> By December 1962, the Gallup Poll named her one of the ten "Most Admired Women of the World," behind "Jacqueline

---

<sup>5</sup> Carpenter, *Reputation and Power*, 247.

Kennedy and Queen Elizabeth II but ahead of Patricia Nixon, Princess Grace of Monaco, Lady Bird Johnson, Helen Hayes and Bette Davis.”<sup>6</sup>

Some scholars, notably Daniel Carpenter in his monumental history of the FDA, have speculated whether the public reception would have been the same if another scientist, i.e. a male one, had been profiled as the gatekeeper against thalidomide in America. I would argue that it would not have been as intense, nor as lasting, and that this was due to Cold War fears and realities. According to polls, fear of the dangers from nuclear energy is far greater among women than men “in every country, at every time.” This was connected with a tendency “when any technology was mentioned, for women to think in terms of safety and their children.”<sup>7</sup>

Unlike incendiary bombs, tanks and missiles, nuclear fallout had the power to mutate fetuses and produce serious or fatal birth defects. Unlike radium poisoning which, from the 1920s, also was identified as potentially deadly to fetuses through unsafe x-ray practices, nuclear fallout could not be avoided.<sup>8</sup> After the 1954 BRAVO American fusion test, scientists warned that the “fine radioactive dust” could cause birth defects in infants born even thousands of miles away.<sup>9</sup>

And what would constitute a radioactive mutant? Popular culture was loaded with examples. The year 1954 brought not only BRAVO, but Godzilla, the 400-foot prehistoric reptile that arose from the ashes of Hiroshima to destroy Tokyo. In the same

---

<sup>6</sup> Carpenter, *Reputation and Power*, 248.

<sup>7</sup> Weart, *Nuclear Fear*, 223.

<sup>8</sup> *Ibid.*, 31.

<sup>9</sup> *Ibid.*, 97.

year, *Them!*, another popular film, chronicled the giant, killer ants that crawled out of the Nevada desert where American atomic bombs were tested.<sup>10</sup>

---

<sup>10</sup> *Ibid.*, 102-103.



“In an old sense of the word,” concluded Weart, “a ‘monster’ was a malformed offspring. If bomb tests violated the natural order, then perhaps it was only to be expected that monstrosities would emerge from the womb of the contaminated earth. Movies did not dare touch the questions of defective babies directly, but since the 1930s, science-fiction magazines, less prudish, had run stories about children deformed by radiation.”<sup>11</sup> Then, on August 19, 1962, one month after Morton Mintz broke the story of thalidomide, Dr. Kelsey and the FDA, and 12 days after President Kennedy awarded Frances Kelsey the Distinguished Service Medal in a widely publicized ceremony, came this newspaper image.<sup>12</sup>

---

<sup>11</sup> *Ibid.*, 108.

<sup>12</sup> “Mother kills her tranquilizer baby!,” *National Enquirer*, 36, 49, August 19, 1962. FOK collection, Library of Congress, cover page.

NATIONAL  
**ENQUIRER**  
THE WORLD'S LIVELIEST PAPER

★★★★★  
FEATURE 15¢

Vol. 36, No. 49, August 19, 1962

ANOTHER  
ENQUIRER  
EXCLUSIVE

# MOTHER KILLS HER TRANQUILIZER

# BABY!



I Couldn't Let  
My Daughter  
Live That Way

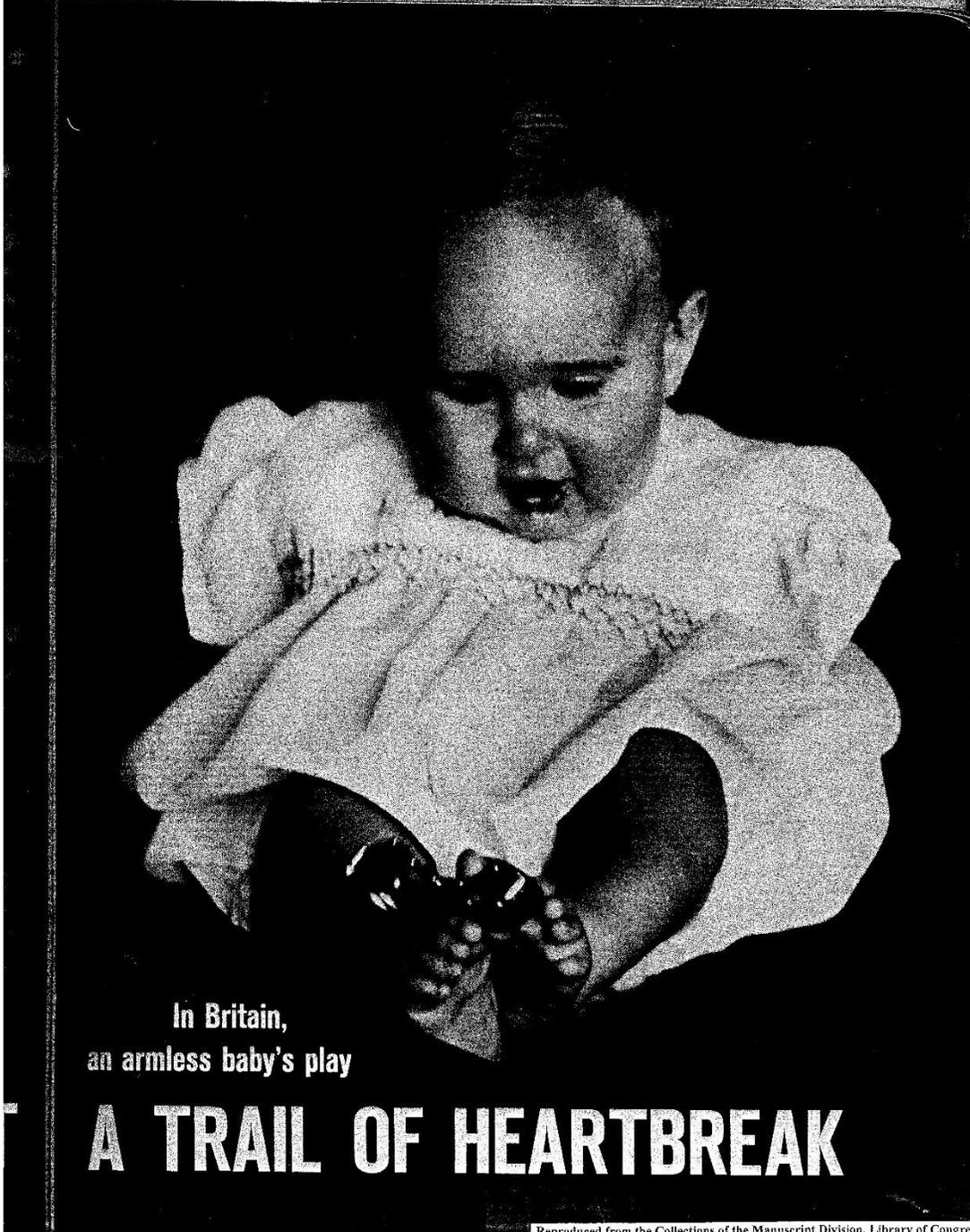
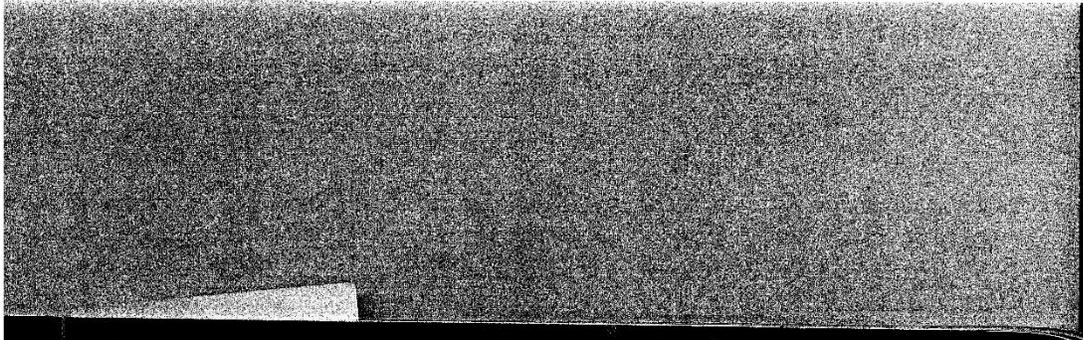


This was the story of Suzy Vandeput of Liege, Belgium, who, along with her doctor and mother, was charged with murder after the euthanasiation of her newborn. She had widespread support throughout Belgium, and was later acquitted. As three prominent criminal lawyers summed up, “The law of our land does not recognize euthanasia. But the law never foresaw that such dangerous drugs could be placed on the market, causing universal disaster.”<sup>13</sup>

Less sensational, yet more influential in terms of shaping American popular perceptions, was *Life* magazine’s multi-page spread, “The Full Story of the Drug Thalidomide,” published August 10<sup>th</sup>. *Life*’s reporters profiled Dr. Kelsey, ran a statement by William S. Merrell, thalidomide’s American promoter, and published its own heartbreaking (and more realistic) photograph of a thalidomide victim.

---

<sup>13</sup> “Mother Kills her tranquilizer baby!,” 7.



In Britain,  
an armless baby's play

# A TRAIL OF HEARTBREAK

Reproduced from the Collections of the Manuscript Division, Library of Congress

*Life* also profiled Sherri Finkbine, an All-American Arizona mother of four, Miss Sherri on Phoenix's Romper Room children's hour, whose husband had brought back tranquilizers for her from England. Mrs. Finkbine was refused an abortion in Arizona, and eventually went to Sweden to end her pregnancy (the foetus was, indeed, grossly deformed and would not have survived).<sup>14</sup> *Life* photographed her in an anguished pose.

---

<sup>14</sup> The Finkbine tragedy was referenced in the Roe v. Wade decision of 1973, legalizing abortion in the U.S.

**LIFE**

VOLUME 6 AUGUST 1962



In Arizona,  
an expectant mother's dread

# THE DRUG THAT LEFT

In the days, weeks and months following the breaking of the thalidomide tragedy by the American press, letters flooded into Dr. Kelsey's home and office at the FDA. Sixty to seventy letters per week, more in the first few weeks, arrived, often addressed simply "Dr. Kelsey, Washington, D.C." Like letters to Santa Claus, mail to Dr. Kelsey required no further elaboration for the U.S. Postal Service.

In this study, I examined a sample of 122 letters which arrived immediately after the first publicity, i.e. between July and August 1962, now housed in the Kelsey Collection at the Library of Congress. They came from across the United States, most from the Eastern Seaboard, Midwestern states, California and Texas, although there were writers from Colorado, North Dakota, Kansas, Hawaii and the Philippines. The letter writers were mostly women (71%), and most of those women were married (65%). Clearly, Dr. Kelsey's actions struck a chord with American mothers, grandmothers, and potential mothers, who wanted to share their feelings with the Good Scientist. I have divided this correspondence into a number of themes, including writer-subject interaction; fellow professionals; "We the People;" the heroic scientist; feminism reborn; and religion and childbirth.

Letter writing, whether fan mail or complaints, has been a traditional vehicle for, or at least an attempt at, interactivity. Whether directed to favourite authors, political, religious or social leaders, or mass media personalities, fan mail constituted "intense, emotional experiences which reveal an honesty of emotional interaction rarely found in printed

documents.”<sup>15</sup> The letter writer also was “impelled by the notion that his [or her] action is serving some useful or important end.”<sup>16</sup>

Many of the correspondents attempted to establish an interactive relationship with Dr. Kelsey. Some included home remedies. The author of a novel piano instruction plan, after seeing a picture of Dr. Kelsey’s daughters seated around the family piano, sent along his book (which daughter Chris related to me was monumentally boring and opaque). Most common, however, were writers who enclosed the newspaper or magazine clipping they had read on Dr. Kelsey’s actions. Ralph E. from Wahpeton, North Dakota, who wrote one letter of appreciation “once every five years,” stated, “the accompanying article in today’s paper moves me to praise your restraint which has likewise served us well.”<sup>17</sup> Mrs. Frank W. of Grass Lake, Michigan cited, “It is with great interest and pleasure that we read in our local paper the *Jackson Citizen Patriot* of Jackson, Michigan, the account of your blocking the marketing of thalidomide in the U.S.”<sup>18</sup> “*The Denver Post* of July 18, 1962 [demonstrated] your conscientious action and discerning judgment,” wrote Mrs. George H. of Littleton, Colorado.<sup>19</sup> Another “new mother” from Brooklyn, N.Y. drew Dr. Kelsey’s attention to Senator Estes Kefauver’s criticism of the revised drug bill, which was also in the newspaper, and encouraged her

---

<sup>15</sup> Karr, *Authors and Audiences*, 154.

<sup>16</sup> Simmons, “Dear Radio Broadcaster, 449.

<sup>17</sup> Ralph L. E., Wahpeton, North Dakota, July 17, 1962, unprocessed materials. Misspelled words and other grammatical errors have been retained to convey the authentic flavor of the letters.

<sup>18</sup> Mrs. Frank A. W., Grass Lake, Michigan, July 18, 1962.

<sup>19</sup> Mrs. George H., Littleton, Colorado, June 19, 1962.

to “show Congress how important a strict law in this field would be. I’m hoping that you’ll be a help in this.”<sup>20</sup>

In two letters, John R. from Watertown, Mass., sent along clippings and detailed the publicity he had heard on Dr. Kelsey: “I’m sending along a nice story about you I enjoyed reading. Was watching Television yesterday when President Kennedy gave his news conference and heard him mention you by name twice about your work. Also watched Druggist Senator Humphrey give his views on same drug. A week or so back watched your television interview. I’m a keen shortwave listener and have heard views on same drug from the BBC London about a debate in the House of Commons and their view.” The 73 year old Ryan might have had an ulterior motive beyond connecting with a celebrity: “Hobbies are shortwave radio and collect used postage stamps.” Perhaps he hoped Dr. Kelsey would send some rare ones along from her myriad of letters.<sup>21</sup> In another letter referencing the international aspects of the thalidomide tragedy, Frederick M. from Albany, N.Y. brought Dr. Kelsey’s attention to the weekly, “*France Dimanche* ... where there appeared an article: or human interest story, describing exactly what you have been trying to avoid in the United States.”<sup>22</sup>

Others were volunteer archivists. John C. D. “carefully removed the clippings and mounted them – your letters are within the folder – as was attached.”<sup>23</sup> “You do not know me,” wrote Dorothy H. of Philadelphia. “I thought perhaps your young daughters

---

<sup>20</sup> Mrs. Frances B., Brooklyn, N.Y., August 2, 1962.

<sup>21</sup> John E. R., Watertown, Mass., July 7, 1962 & August 2, 1962.

<sup>22</sup> Frederick M., Albany, N.Y., July 17, 1962.

<sup>23</sup> John C. D., Jr., no address, August 29, 1962.

might be making a 'scrap-book' for you and would like to have the 'mast-heads' of our Philadelphia papers."<sup>24</sup>

Many of the correspondents were professionals, business people or charity administrators who sent their letters on letterhead. Doctors, Registered Nurses, a Tuberculosis worker in China, a female Physical Education Director, and others in the health care field cited the magazine articles they read and added their own experiences. Charlotte M. was a volunteer in the "Orthopedic section of Illinois Research," and had seen "many deformed children and each one stays in one's memory."<sup>25</sup> Lawyers, investment managers, and religious leaders commended Dr. Kelsey, with William F. G., an insurance broker, writing, "May I compliment you on your confidence in your training and knowledge, and your plain old fashioned American stick-to-your-guns."<sup>26</sup> Frank G. Shea, Counsel for Impact Rhode Island, wrote a terse "Enclosed is an editorial from our local paper of August 4, 1962. The Providence Journal reflects my own sentiments."<sup>27</sup>

---

<sup>24</sup> Dorothy H., Philadelphia, PA, July 18, 1962.

<sup>25</sup> Charlotte E. M., Illinois, August 14, 1962. See also Mrs. Patricia H., RN, July 17, 1962; Miss Helen B., RN, n.p., July 19, 1962; Nicholas D.M., Heart Association of Erie County, Inc., Buffalo, NY, July 16, 1962; Albert F., MD, Los Angeles, CA, n.d.; Ruby H., Des Moines, IA, July 23, 1962.

<sup>26</sup> William F.G., Spokane, WA, July 18, 1962. See also Father Giles W., Belleville, IL, July 30, 1962; Pastor Shigeo T., Honolulu, HI, August 2, 1962.

<sup>27</sup> On the letterhead banner, the Vice Chairman of Impact R.I. was a director of the AFL-CIO, while the Directors included bank presidents, company presidents, and religious leaders.

Many of the letter writers expressed their sense of helplessness to influence their government against the power of giant corporations, and how inspired they were by Dr. Kelsey. "It is today difficult," Carpenter concludes, "to imagine or recreate the simultaneous sense of fear of thalidomide, the general worry about the capacity of national institutions to prevent another occurrence of a like disaster, and the widespread admiration for Frances Kelsey. Mothers throughout the nation held Kelsey personally responsible for the good health of their infant children."<sup>28</sup> Herschel D. confided, "This is written by one of the mass of little people in this country who feels so utterly defenseless against the drug industry."<sup>29</sup> "I know that the Food and Drug Administration is diligently working for our protection," wrote Mrs. Beverly F., "but I also know that there are times when the best is not good enough. Is there anything that I, as a private citizen, can do to help the Administration?"<sup>30</sup> "Thank you Doctor Kelsey for your kindness and understanding of human beings – I'm just a nobody – but wanted you to know how wonderful it is to know there are angels in this money mad world – like you," wrote Bella H. [no date or address]

Others expressed more deep-seated dissatisfaction and alienation. "Dear Doc," Roy G. of San Pedro, CA wrote, "Your conduct inspires renewed faith in at least the essential activities of some Gov. agencies."<sup>31</sup> "It is the people like you that do their job year in

---

<sup>28</sup> Carpenter, *Reputation and Power*, 251.

<sup>29</sup> Herschel D., no address, July 23, 1962.

<sup>30</sup> Mrs. Beverly F., Hollywood, CA, August 2, 1962.

<sup>31</sup> Roy G., San Pedro, CA, July ?, 1962.

year out – no matter whom is in power in Washington that I would enjoy hearing more about. I think it would help to give those of us that feel we have lost our share of the government a feeling of confidence that we are being thought of,” wrote Mrs. Clarence G.T. of Dallas, TX.<sup>32</sup>

“One hears so much these days of the laxness and corruption of public figures, that it is certainly heartwarming to know that there are dedicated individuals who adhere to their principles in spite of pressures that are brought upon them,” wrote Mrs. Charles L.G of Cleveland, OH. “We thank God for creating people like you who fight to protect the citizens of this great country of ours.”<sup>33</sup> “Hooray for you, Dr. Kelsey!” crowed Mrs. Dorothy D.L. of Washington, DC. “IF our civilization survives, it will be because of people like you who have integrity and a sense of the value of human life – our best defense against the destructiveness of the purely materialistic.”<sup>34</sup> “We need more public officers of your valor,” wrote V.B. Dingleline of Oakland, CA, “officers possessing your kind integrity, courage and unbribability by Big Selfish interests who prize the ‘ALMIGHTY DOLLAR’ above everything. MORE POWER TO YOU, MY GOOD DOCTOR.”<sup>35</sup>

Mary T.N., secretary to the President of a New York-based engineering firm, wrote, “Unfortunately, in today’s world, there is so much compromise, so much haphazard

---

<sup>32</sup> Mrs. Clarence G.T., Dallas TX, July 28, 1962.

<sup>33</sup> Mrs. Charles L.G., Cleveland, OH, n.d.

<sup>34</sup> Mrs. Dorothy D.L., Washington, DC, July 22, 1962.

<sup>35</sup> V.B. Dingleline, Oakland, CA, July 30, 1962.

work and so many people eager to take the easy way, it is encouraging to know that there are people like you in responsible positions.”<sup>36</sup>

In this Cold War era, some writers associated the drug companies with another great threat to America.<sup>37</sup> “Have been wondering,” wrote Mrs. Brone L. of Denver, CO, “if the Physicians that have administered it to the thousands of mothers have communistic tendencies. It would naturally be their ‘conquest’ if they could cripple our future generations.”<sup>38</sup> Certainly the heroic scientist was needed.

Clarence Karr has argued that letter writers to early 20<sup>th</sup> century Canadian novelists (including Ralph Connor, Lucy Maud Montgomery and Nellie McClung) lived in a “transitional age [in which] the noble, elevated sentiments of the neo-classical age continued to inform their minds, their emotions, and their spirits. They cherished the values of sacrifice, devotion, order, truth and beauty. Their intense feelings reflected that nobility.” Karr did not believe this sensibility, as reflected in fan letters, lasted beyond the 1940s, but these values are evident in letters to Dr. Kelsey, where she is lionized and invested with a variety of heroic qualities.<sup>39</sup>

---

<sup>36</sup> Mary T.N., New York, July 19, 1962.

<sup>37</sup> Mrs. Kenneth E.K., LPN, Dayton, OH, August 15, 1962, who somewhat surprisingly lived on Babylon Street.

<sup>38</sup> Brone L., Denver, CO, August 2, 1962.

<sup>39</sup> Karr, *Authors and Audiences*, 168.

One such quality was Dr. Kelsey's ethical fortitude, which was portrayed as a "credit for dispassion, neutrality, and objectivity in the pursuit of 'duty.'"<sup>40</sup> This was a reversal, or perhaps rehabilitation of the negative stereotype of the unfeeling, male, mad scientist who had wrought nuclear and pharmaceutical destruction.<sup>41</sup>

Miss Madeline McK. wrote, "You'll probably never make a million dollars, but even if you did I know it would never give you the satisfaction you must have felt when your dedication and determination proved so right."<sup>42</sup> The heroic narrative of maintaining the course against great odds was alluded to in many letters: "Much credit is due you for holding to your beliefs," wrote Joan B.<sup>43</sup> Mrs. Patricia K.R. of Hartford, CT, pithily stated, "Creative stubbornness is a quality I rate high."<sup>44</sup>

"Your courage in fighting off these monstrous forces, the drug manufacturers and their cohorts, is something no longer heard of in our polluted world," wrote the Dunlaps of Hollywood, CA. "We would like to feel that your sterling example of courage, integrity and concern for human welfare may influence some of your colleagues who, we

---

<sup>40</sup> Carpenter, *Reputation and Power*, 249.

<sup>41</sup> Carpenter's only misstep in an otherwise monumental volume is his speculation that Kelsey's persona had "special appeal to traditional Catholics and conservative Protestants who placed particular moral emphasis upon the developing fetus and who saw human life as preceding birth." The experience of pregnancy, except perhaps for women with serious psychological or intellectual incapacitation, is a growing relationship with another human, and should not be confused or conflated with the Pro-life/Anti-choice issue.

<sup>42</sup> Miss Madeline McK., n.p., July 25, 1962.

<sup>43</sup> Joan Bennett, n.p. July 26, 1962.

<sup>44</sup> Mrs. Patricia K.R., Hartford, CT, July 31, 1962.

strongly fear, would have, and have been swayed by other considerations, considerations of a dubious nature. All the blessing upon you, and may we all live to see a world wherein the Frances Kelsey(s) prevail. As one of our commentators, Joe Dolan, said on TV, you should be “canonized”, you are a SAINT.”<sup>45</sup> “Your name will be remembered with those of other brave heroines like Florence Nightingale, Clara Barton, Sister Elizabeth Kenney,” wrote Alice P.A. of South Royalton, VT.<sup>46</sup>

Several women displayed a feminism which percolated under the apparent domestic harmony of the Cold War era. “It is with the deepest heartfelt appreciation and respect for honesty built in the fibers of your womanly charm that we take time to write you this message,” wrote Mrs. John P.R. of Canton, Ohio, a childless member of the American Federation of Health.

Surely the Food and Drug Administration could do with more sisters like you. A true sentinel of humanity in Washington, Dr. Kelsey! May God give you many pleasant years as a guidepost to the lame brains – and the dead wood – and the rubble that are filling such an organization. To think the most powerful Nation on the face of the earth has so many imbeciles drawing such fantastic salaries! There are words known I am sure that could describe the lethargy, the stagnation and the brains without a bounce that filters through the portals of your department and administration! We offer a long lingering lovable prayer to an

---

<sup>45</sup> The Dunlaps, Hollywood, CA, July 21, 1962.

<sup>46</sup> Alice P.A., South Royalton, VT, August 7, 1962.

honorable woman! My feeling is we should have more skirts and less dead pants cluttering up valuable space! This is enough I know you would say and we know how happy you are to have that inborn stubbornness, bred no doubt from good pioneering stock.”<sup>47</sup>

“Dear Doctor,” wrote Mrs. John J.M. of Yeardon, PA, “My compliments on your vigilance on the public’s behalf. We really do need more women in government. No reply necessary.”<sup>48</sup> “For the first time I believe some Doctors are interested in our health and not the money... I hope this will be a challenge to women in any walk of life to be stubborn about what they know to be wrong. Men are more interested in their job and being a financial success than in being honest,” wrote Borghild D., who added “Please do not give my name to anyone.”<sup>49</sup>

“They can call you ‘stubborn,’ or anything else they want to,” wrote Mrs. Charles G. of Eddington, PA,

but it shouldn’t bother any mother in the USA. Should just make them mad! ... As far as I am concerned, you are now in a category with Mrs. Roosevelt, Barbara Fritchie, Hellen Keller and other great ladies. You are the kind of people who make the rest of us proud we are a lady. Those movie star tramps make us feel degraded. I have always felt that we needed more women in Government, and Industry, and Politics. As women have a different viewpoint than men have. Esp. ‘down to earth’ women – regular, real, women. Many men are too ‘commercial’

---

<sup>47</sup> Mr & Mrs John P.R., Canton, Ohio, August 3, 1962.

<sup>48</sup> Mrs. John J.M., Yeardon, PA, August 3, 1962.

<sup>49</sup> Borghild D., Waunakes, WI, August 2, 1962.

too 'business.' They have lost feeling – are not human any more. It's all 'big business' with most of them. Smoke filled rooms, highballs, 'what can they get out of it.' A lot of people are heartsick and disgusted and discouraged. They try to bring children up right, and are hard put to find 'good examples' to point out to them. Then along comes someone like you. Obviously didn't take graft! A clean, good face! Somebody who could say 'no' to big business. Well, we can be very thankful for people like you. I feel that this is why our country is truly 'overrunning with milk and honey' – why we haven't been bombed. It is because God has still found 'ten good people' so – unlike Sodom and Gamorrah, we are still saved. I am not a man. I am a 55 year old grandma. But I can also say – on this muggy rainy day – you are like the sunshine – like a breath of spring. I, and all my family – thank you from the bottom of our hearts. May God bless you and keep you safe to a good age.”

Then in a page-long postscript, Mrs. Charles added,

This letter does not imply that the men in your dept. are not good people. I hope all of them are. Perhaps the cranberry sauce could have been handled differently. I don't know... I still wish someone had yelled about the poison stuff they dip fish in to preserve it. Then that little 4 year old boy would still be alive. And I bet they still dip fish in the stuff as fish in stores here do not taste like ones people catch. No more than tomatoes taste like tomatoes any more. Wish they'd

have more women. Then maybe we'd get decent tasting food again. I haven't had a good cup of coffee – at home, or any place else, in ten years.”<sup>50</sup>

“As a Mother, a Grandmother and a Great-Grandmother of lovely children,” wrote Mrs. Susan M.O.,

I wish to thank you for your stamina and integrity... Years ago, when I was fresh out of college, I worked for Woman Suffrage and have always been a feminist believing in better opportunities for women! Surely you have vindicated all we have ever done or said in this long battle for women to have a vote and voice in government. I, for one, am most proud of your performance and thank God you were (and are) at your post, shielding and protecting innocent victims.”

Mrs. O. added that she was a columnist for the *Indianapolis News* for almost fifty years and still wrote a women's feature column.<sup>51</sup>

That religion remained a strong force in early 1960s America was reflected in the generous use of religious imagery, prayers and citations in the letters.<sup>52</sup> “God bless you and all those you hold dear,” was a common refrain.<sup>53</sup> “May God continue to bless and

---

<sup>50</sup> Mrs. Charles G., Eddington, PA, July 18, 1962.

<sup>51</sup> Mrs. Susan M.O., Indianapolis, July 20, 1962.

<sup>52</sup> This is similar to what Karr found in *Authors and Audiences*, where he concluded citing religious imagery in letters was a 19<sup>th</sup> century convention.

<sup>53</sup> Mrs. Edward L., Northvale, NJ, July 2, 1962. See also Mr & Mrs Clarence R.S., Blackwood, NJ, July 23, 1962.

keep you although you may have already accomplished your life's mission and may the great physician Jesus continue to walk with you as you go about your daily work," wrote Norma W.<sup>54</sup>

What is interesting is that Dr. Kelsey was a scientist first and foremost, and did not openly display strong religious beliefs, but this in no way discouraged her admirers – Catholic, Protestant and Jewish. I would argue that this speaks to the very core of religiosity itself: a need to control the uncontrollable, and know the unknowable - birth and death.

Childbirth is the most natural of processes: how we survive as a species. Yet childbirth remains, even in the most technologically advanced society, unpredictable, and mostly uncontrollable. Modern obstetrics can manage risks; it cannot guarantee a totally risk-free experience. It was only during the 1940s, just two decades before the thalidomide tragedy, that American women could feel somewhat assured that they would survive childbirth, and infant mortality rates also were falling into a more comfortable zone. But losses of mothers, losses of babies, babies born with defects, all of these were uncomfortably well known to this generation.

And that was in relatively normal circumstances. Poverty, warfare, heredity – all were recognized as threats to childbirth, but accustomed, localized, knowable threats. But then add nuclear fallout and pharmaceutical poisoning; these were not threats, these were abominations: global in nature, unforeseeable, unavoidable to mothers who wanted nothing more than to protect and nurture their unborn children. For these

---

<sup>54</sup> Mrs. Norma W., Franklin, IL, n.p.

mothers, and fathers, and grandparents, only religious blessings adequately expressed their gratitude to Dr. Kelsey.

“Thank God that He created you and thank you for withstanding all pressure etc. concerning thalidomide... God has granted us two healthy children (Boys ages two and one) and one inevitable abortion - His will not ours. But we do intend to have many more children. If God grants us a deformed child, we’ll accept it graciously. We would accept a child deformed from medicine but would be awfully bitter towards man. To forgive and forget when a person’s life is concerned would be nasty medicine for anyone. Thanks again. Sincerely, Dick, Eva, Richard and Aaron S.”<sup>55</sup> “Thank God for people like you to watch over us. I shudder when I think what may have happened if that drug had been let loose among us. I will remember you in my prayers as so many others must be doing or should when they realize what you have averted,” wrote Theresa C., mother of three.<sup>56</sup>

“If the women of the United States should ever select a champion,” wrote Mrs. Edith H.H. of Lexington, SC, “it should be you. I am almost nine months pregnant, and ever since I first read about the thalidomide in Newsweek magazine, I have thanked God that I have not taken any. If it weren’t for you and others that safeguard our health, I more than likely would have taken this drug.”<sup>57</sup> “Thank God for people like you, that have the courage of their convictions and stick to them as you do, may God always walk with you,” wrote Hattie M.A. of Arlington Heights, IL.

---

<sup>55</sup> Eva S., Lower Burrell, PA, August 7, 1962.

<sup>56</sup> Theresa C., Rochester, NY, July 31, 1962; See also Mrs. William G., Louisville, KY, July 18, 1962.

<sup>57</sup> Mrs. Edith H.H., Lexington, SC, August 17, 1962.

I write this letter from a grateful heart because I have three Grand-sons and another one on the way and what a horrible thought that through no fault of my daughters, they could give birth to babies with such deformities. Dr. Kelsey why do the companys [sic] put all the drugs on the market before they have really been tested for a long time and not use people for their experiments to the sorrow of all concerned and for generations to come. Surely the use of drugs and chemicals (in foods) is doing us so much harm, the preservatives that they use in foods is causing damage that can never be remedied. Surely the people of the United States (tax payers) are entitled to this protection (is this department for the protection of the public, or is it for the use of the chemical companys)?<sup>58</sup>

A mother from Arlington, Texas wrote,

In June of last year (1961) I was taking tranquilizer pills and was then in my third month of pregnancy. In January I gave birth to a perfectly normal baby girl, our first child. As I watch her learn to creep, pull [sic] her feet in her mouth, and otherwise use her arms and legs, I am increasingly gratified to you... As long as you and people like you work in Food and Drug Administration, we of the American public can accept with confidence the medicines our doctors prescribe.<sup>59</sup>

“I am writing this letter to you in gratitude for the suffering and heartache you have spared me, and millions of mothers in the U.S.,” wrote Eleanore J. of Buffalo, N.Y.

---

<sup>58</sup> Hattie M.A., Arlington Heights, IL, July 17, 1962.

<sup>59</sup> Mrs. W. D. T., Arlington, Texas, July 19, 1962.

“Seven months ago, I had the most beautiful healthy and lively baby girl you’ve ever seen. I thank God and you, every time I see her kick and wave her arms. When I first found out I was pregnant with my third child, I was nervous and distraught, and most likely would have taken thalidomide, if it would have been available to me... May God Bless you all the days of your life.”<sup>60</sup>

“As the mother of three healthy, lovely children I thank you for your courage. Bless you and yours,” wrote Elaine G. (Jewish), Brooklyn, NY, August 3, 1962. “My husband and I want to thank you for being ‘unreasonable’ over the drug thalidomide. We were blessed with a fine healthy, baby girl on Jan. 21, 1962, and when I think what might have happened I get chills! Our hearts go out to the thousands of mothers and pitiful babies in England,” wrote Marilyn J.<sup>61</sup>

Jean B. added, “Because we have a perfect, healthy three months old baby, I know that you are one of our guardian angels.”<sup>62</sup> “As a woman four months pregnant I want to thank you from the bottom of my heart for keeping the drug off the market. I know thousands of other pregnant women are as grateful as I am.”<sup>63</sup>

“May God bless you!” succinctly wrote Mr & Mrs Donald J.M., parents of “a healthy 3 month old baby girl.”<sup>64</sup> “We are expecting our second child in October, and hope it turns

---

<sup>60</sup> Mrs. Eleanore J., Buffalo, NY, July 31, 1962; see also Mrs. Frances T.T., mother of ten, Fairchild AFB, August 7, 1962.

<sup>61</sup> Marilyn J., no address, July 25, 1962.

<sup>62</sup> Jean W.B., July 26, 1962.

<sup>63</sup> Mrs. Sandra M., Washington, DC, August 4, 1962.

<sup>64</sup> Mr & Mrs Donald J.M., no date, no address.

out normal as was the first. Thank you, Dr. Kelsey, very much for increasing our chances of having a normal child. Thank you!”<sup>65</sup>“What wonderful-looking girls you have!” wrote Mary G. B. of Paterson, NJ., mother of two boys and two girls. “They look so healthy and happy and proud of their mother! As indeed we all are! To think that you made it possible for countless parents to have healthy, normal children by what you did!”<sup>66</sup>

“Just a heart felt – “Thank you” for your courage in “making haste” slowly and saving America from harvesting “deformed babies” – due to the dangerous sleeping pills – My sympathy goes to those British, German and Australian mothers whose children’s deformity now causes them anguish and loss of sleep.”<sup>67</sup> “Within the last two years,” wrote Evelyne K., “I had two babies and not knowing what the circumstances might have been, I am very grateful to you, for your insight, your courage and your love of human nature – the peaceful smile of contentment of a mother as she gazes at her newborn after she has been assured that he or she is a beautiful baby, is a priceless gift of life.”<sup>68</sup>

And what did Dr. Kelsey have to say in the midst of the intense, often florid rhetoric about technological experimentation and defected babies? As the public face of the FDA, she gave speeches to dozens of audiences, ranging from the scientific to the governmental to the public – most often women’s clubs. She gave the same speeches

---

<sup>65</sup> Mrs. Robert M., no address, July 19, 1962

<sup>66</sup> Mary G. B., Paterson, NJ, July 17, 1962.

<sup>67</sup> Mrs. Walter T.C., Enfield, N.C.

<sup>68</sup> Evelyne K., no address, August 8, 1962.

many times – one of which was “Safety of Drugs during Pregnancy.” In every instance, her tone and language was measured, scientific and objective, that is, the voice of the Good Scientist.

“When drugs are administered during pregnancy,” she began,

two evaluations must be reached: that involving the safety to the mother; and that involving the safety to the unborn child.... Until comparatively recently it was felt that the placenta served as a protective barrier preventing exposure of the embryo to drugs and other compounds consumed by the mother during pregnancy. We now know that the so-called placental barrier permits virtually all such substances to pass from the mother’s blood stream to that of the developing child... We also know that substances need not cross the placental barrier to have an effect on the fetus, but may exert an indirect effect by interfering with the metabolic processes of the mother.”<sup>69</sup>

Dr. Kelsey goes on to describe the effects of drugs on the fetus, again without the impassioned language of her public supporters:

Drugs given very early in pregnancy may result in death of the embryo and subsequent abortion which may or may not be recognized. Drugs given during the period of the rapid development of the organ-systems of the embryo, if the

---

<sup>69</sup> Frances O. Kelsey, “Safety of Drugs during Pregnancy.” MS Paper presented to the International Childbirth Education Association Eastern Regional Conference of 1967, April 21, 1967, Washington, D.C., p. 1-2.

drug is not sufficiently toxic to cause death, may give rise to distortions of growth which result in birth deformities.<sup>70</sup>

Dr. Kelsey placed the thalidomide “episode” within the context of earlier reports of birth defects associated with “drugs, infections, or other environmental factors.” These included the 1929 reporting of “microcephaly and mental retardation in a high percent of offspring of mothers receiving pelvic irradiation during pregnancy;” “the offspring of mothers who were exposed to the atomic bomb explosion in Hiroshima in 1945;” the 1941 association of German measles in the first trimester of pregnancy with congenital malformations in the offspring, “including eye damage, hearing loss, and heart defects;” and the 1952 report that the drug aminopterin, used in the treatment of leukemia, “frequently resulted in deaths or deformities in the offspring of women receiving the drug early in pregnancy.”<sup>71</sup>

Dr. Kelsey concluded her talk by supporting the judicious use of drugs, even during pregnancy: “There are obviously many times during pregnancy when the withholding of a drug would have much more serious consequences than the possible risk of adverse effects to either the mother or the child, and it would, indeed, be unfortunate if fear of adverse reactions to the offspring led to the withholding of a drug that might be essential to the mother’s well-being.”<sup>72</sup>

This was hardly the rhetoric of the avenging maternal angel, an image with which many of Dr. Kelsey’s early fans wanted to cloak her. Even the enthusiastic journalists who

---

<sup>70</sup> Kelsey, “Safety of Drugs,” p. 3.

<sup>71</sup> Kelsey, “Safety of Drugs,” p. 4-5.

<sup>72</sup> Kelsey, “Safety of Drugs,” p. 13.

painted her with the wide brush of the heroic crusader had to, once they actually met and conversed with her, temper their descriptive phrases. The stubborn, careful scientist was rewarded with a promotion in 1963 to Chief of the new Investigational Drug Branch of the FDA Division of New Drugs. The consummate bureaucrat, she successfully negotiated herself and her department through a series of Democratic and Republican administrations, and FDA restructurings, until her retirement in 2005, after 45 years, at the age of 90. In those years, she remained the apostle, and arbiter, of Good Science.