Childbirth in a Pavlovian way: the campaign of Psycho-prophylactic method of delivery in 1950s China

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Abstract

It is difficult to trace the framing of knowledge that childbirth meant to be painful; in fact, pain seems to be located into childbirth from the beginning. While by looking into its franchise history, we find out that pain in childbirth has been articulated and represented in various ways owing to time and space. This article examines how the Chinese Communist Party start the campaign of promoting Soviet Union's psycho-prophylactic method (PPMD) of delivery (known as Lamaze method to the Western world) in early 1950s China. Though the adoption of Soviet technique was unsuccessful, the campaign shared political nature with other movements at that time and altered boundaries between biomedicine, Soviet medicine and the Traditional Chinese Medicine.

Introduction

It's widely acknowledged that being a mother is quite a rewarding and proud occupation, however, its prologue, the process of childbirth, is never easy for Dong Ying, who gave birth to her son in 1933, "my genitalia was bleeding, it's so much painful and I had to do something to resist, I rolled on the bed, screaming aloud, feeling the room rotate, wall began to crack down. I was so afraid, so I cried. So many lovely babies came to life in this operating room, yet so many of them lead to death of their mother. Maybe I would die here; I am too young to die!" pain in childbirth turned Dong Ying into crazy for a while, making her see some illusions and even think of her funeral, and she lost a teeth during childbirth.

¹Dong Ying, "Chanfu riji (產婦日記)" (diary of puerpera), Funv yuekan (women monthly), (1933) Vol.2, No.2.

Dong Ying's pain was never ignored at that time. Before her delivery, Tongren Yixue (Medicine of tongren) published a article titled "painless labor" by Japanese physician Kuji Naotaro, recommending anesthesia methods for labor, including spinal anesthesia and sacral anesthesia. ²Popular magazines like Lvxing zazhi (Journal of tourism) also introduced Soviet anesthesia to readers.³ When came to 1940s, more similar essays arose. The childbirth at that time was witnessing a process of medicalization and learning from the Western world.

When Dong Ying was suffering the painful moments during labor, obstetrician Dr. Read in England was planning to write his magnum opus which caused a stir later on: *Childbirth without fear*. And the inspiration for this book came from a lying-in woman who decided to delivery without anesthesia or analgesia. After the smooth and quiet labor, the mother asked Dr. Read: "childbirth is supposed to be painless, isn't it, doctor?"⁴ While women in China still regarded childbirth too painful to stand and cried for anesthesia, women in England began to be fed up with all sorts of medication and tried to reproduce painlessly on their own. How do we understand Dong Ying's appeal while women in Western Europe had overcome the pain and fear during reproduction?

Twenty years later, Dong Ying turned into a middle-aged mother, and she might be a little surprised to see the new way to have childbirth. It was called "Soviet painless childbirth", or "the psycho-prophylactic method of childbirth". It was said that this new method would make childbirth not only a painless process, but also a joyful experience.⁵

Tao Hao was a 24-year old middle school teacher who delivered her child in 1952. During her pregnancy, lots of women told her that pain in childbirth feels like your bone broken, and one even said "just feel

²Kuji Naotaro, "Painless labor", *Tongren Yixue*, Vol.4, No.5, 1933.

³"Wu tong shengchan (無痛生產) "(painless delivery), Journal of tourism, Vol.10, No.7, 1936.

⁴Grantly Dick-Read, *Childbirth without fear*, 2d rev.ed (New York: Harper & Row, 1959), p.18.

⁵See Zhou Dongsheng, "zai xiaosheng zhong sheng xia le wo de haizi(在笑聲中生下了我的孩子)"(give birth to my baby in laughter), *Sulian wutong fenmian*, Shenyang: Dongbei yiyao tushu chubanshe, 1952.

equal to death". Tao was too frightened to eat or sleep. However, after seeing an introduction on Soviet painless childbirth method on *Renmin Ribao*, Tao felt a hope arise and she decided to try this new technique. She learnt about the new method for two months, including reason why women in the past felt painful during childbirth and why the new way would present a painless delivery. On July 7, she gave birth to her child successfully; her labor was only two hours and totally painless. "Tao's successful is inspiring news to millions of women".⁶

Unfortunately, this new benefit for women ended very soon, we can assume there were not so many women as lucky as Tao Hao⁷. In fact, news reports on PPMD only existed in 1952, meanwhile archives showed PPMD was at least practiced in 1954⁸ and medical books published in 1960s still mentioned the soviet method.⁹ The failure of campaign could be explained in three aspects: firstly the economic reason, though the method itself did not need any medication, its practice still meant a huge investment which government barely afford: education for puerperal for months, training programs for physicians and nurses, and allowance for women who agreed to give birth in this way;¹⁰ secondly, changing situation in USSR: promotion of PPMD in Soviet Union was interrupted after the death of Stalin, and the deteriorating Sino-Soviet relationship in 1960s prohibited regular communication between their physicians, China was sort of reluctant to begin its TCM project-using Chinese medicine as a substitution of "Western" and Soviet medicine; the last one is the most complex: is the nature of childbirth, for childbirth is a unique, very personalized experience, mother seems to be the only person to judge whether

⁶Sulian wutong fenmian fa (Soviet painless childbirth), Shenyang: Dongbei yixue chuban she, 1952.

⁷It's hard to estimate number of childbirths given in this method because hospitals seldom made statistics after the short campaign and it's difficult to judge whether it was still the PPM after the intervention of traditional Chinese medicine (TCM) in late 1950s. ⁸"Shanghai shi renmin zhengfu guanyu Shanghai shi tuixing wutong fenmian fa gongzuo baogao", Shanghai municipal archive, B242-1-691-26.

⁹Both Xi Cuilan's *Jianyi zhuchan xue* (簡易助產學)(introduction of midwifery)(Beijing: Renmin weisheng chubanshe, 1960) and He Yingkui's *Shengli chanke xue* (生理產科學) (Biologically Obstetrics)(Beijing: Renmin weisheng chubanshe, 1959) have whole chapter on PPM; while *Weisheng he baojian* (衛生和保健) (hygiene and health care)(Shanghai: Shanghai diyi yixue yuan) and *Yiliao changgui* (醫療常規) (Routines of medicine)(Shandong yixueyuan fushu yiyuan, 1964) contain a few pages on PPM.

¹⁰"Gonggong weisheng ju guanyu Tianjin shi wutong fenmian fa tuixing weiyuanhui zuzhi dagang de baogao ji wutong fenmian gongzuo baogao (公共衛生局關於天津市無痛分娩法推行委員會組織大綱的報告及無痛分娩工作報告)", Tianjin Municipal Archive, X0053-D-001534.

the delivery is painful or not¹¹, as a result it's difficult to evaluate the effect of PPMD, for its only aim is to eliminate a very subjective, word-destruction¹² entity, the pain. Thus we could either believe the practice of PPMD saved thousands of women like Tao Hao from painful experience which Dong Ying suffered, or we might just regard Tao's story is just a production of propaganda, because these stories all looked alike.¹³

This article is not intent to discuss whether the PPMD really worked in 1950s china¹⁴, but tries to investigate the cultural and medical meaning of this Soviet method instead, by looking into its theoretical background in medical domain, as well as its propaganda connecting with people's everyday life, showing exactly what did PPMD meant to people.

PPMD in USSR, a history

The "psycho-prophylactic method" of preventing or minimizing pain in childbirth was developed in the Soviet Union in the late 1940s by Il'ia Zakharevich Vel'vovskii, a neurologist working at the Ministry of Transport's Central Psychoneurological Hospital for Southern Railroad Workers in Kharkov. In 1951 the Ministry of Health adopted Vel'vovskii's method as standard procedure for normal births in all obstetrical institutions in the USSR and undertook a large-scale program to provide the facilities and trained personnel for its implementation. This decision was based on more than simple recognition of a

¹¹It is according to this logic that came the campaign of "Twilight Sleep", an anesthesia made the women forget pain in delivery in order to create a "painless" childbirth; however physicians would be the only witness of women's reaction to pain during childbirth. See Margarete Sandelowski, *Pain, pleasure, and American childbirth: From the twilight sleep to the Read method, 1914-1960*, Philip Wilison ed., *Childbirth: changing ideas and practices in Britain and America 1600 to present*, Garland Publishing, Inc, 1996, Rachel Friedman, "There ought to be no pain: Twilight sleep and the experience of painless childbirth in early 20th century America", Master thesis, Harvard University, 2001.

¹²Elaine Scarry, *The Body in Pain: The Making and Unmaking of the World*. Oxford University Press. 1985.

¹³There are abundant stories like Tao Hao in pamphlets and newspapers during 1952, all written in the same logic: a woman in pregnancy was warned that childbirth was extremely painful so she got really worried about that; however, physicians taught her the new PPM and she finally believed in the Soviet method and delivered her baby without feeling pain.

¹⁴For the childbirth is quite a private experience, it's hard to judge whether a childbirth is truly painless or whether it's the PPM that made the delivery painless. Previous studies on Lamaze method(which, to some extent, developed from PPM, and was widely used in US and Europe during 1960s-1980s) showed it's not easy to tell it is efficient, for the result was, and only could be, based on narrative of women themselves, thus similar research might come up with contradicted outcomes. See Elkins, "An adequately controlled study of the effectiveness of PPM training", in Norman Morris ed. *Psychosomatic medicine in obstetrics and gynecology*, Basil: Karger, 1972, Klusman, "Reduction of pain in childbirth by the alleviation of anxiety during pregnancy", *Journal of consulting clinical psychology*, 1975, Vol.43, No.2.

successful medical innovation, particularly since Soviet obstetricians were far from giving it unqualified approval. It owed more to the political and ideological imperatives of Stalin's regime which were then intruding deeply into the work of Soviet scientists and physicians. In fact, after Stalin's death, the PPMD swiftly lost official support and finally vanished from the historical stage.¹⁵

Ironically, the famous Lamaze's method, a technique which developed from the PPMD, had a big success later on in Europe and America, leading a "natural childbirth movement"¹⁶ together with Dr. Read's "low-key method"¹⁷. Why did two similar methods face different destinies? Researchers attribute the cause of Natural childbirth to the feminist movement and consumer health organizations as well as the development of biomedicine. Unlike Western Europe and United States, factors like "consumer demand" could not be found in Soviet Union, women were absent in this medical practice, even though it was supposed to be a gift for them.¹⁸

The PPMD claims that the pain in childbirth is just a production created by fear and anxiety, and women can get rid of the pain by taking deep breath, doing massage, and most importantly, believing the non-existence of labor pain. This set of theory is said to be built on works of Ivan Petrovich Pavlov, a famous Russian physiologist who even won the Nobel Prize. Pavlov set forth a concept called Second Signaling System, a qualitatively unique form of higher nervous activity peculiar to man; a system of speech signals (pronounceable, audible, and visible). Researchers later on tried to copy this concept into study of pain in childbirth, they articulated that the second signaling system, together with theory of conditioning, one of Pavlov's greatest achievement, contributed to the making of labor pain: women were

¹⁵John D. Bell, "Giving Birth to the New Soviet Man: Politics and Obstetrics in the USSR", *Slavic Review*, (Vol. 40, No. 1, 1981), pp. 1-16.

¹⁶See Jean Ispa, "Soviet and American Childbearing Experiences and Attitudes: A Comparison", *Slavic Review*, Vol. 42, No. 1 (Spring, 1983), pp. 1-13; Shelly Romalis, "Natural childbirth and the reluctant physician", in *Childbirth: alternatives to medical control*, Austin: University of Texas, 1981.

¹⁷See Margarete Sandelowski, Pain, pleasure, and American childbirth: From the twilight sleep to the Read method, 1914-1960

¹⁸John D. Bell, "Giving Birth to the New Soviet Man: Politics and Obstetrics in the USSR"

told the childbirth was full of pain, such words stimulated their body so that they could not relax during childbirth and be more sensitive to uncomfortable feelings, thus they might be more likely to feel the pain.

It's reluctant to admit that PPMD was developed from Pavlov's theories; in fact, it just borrowed Pavlovian concepts to support an idea that had already existed (it's quite normal for physicians to encourage puerpera to take deep breath and comfort them the delivery is not horrible as they think before the occurrence of PPMD¹⁹), however, its relationship with Pavlovian theories contributed to its success (chosen as a national campaign though in a limited time period) in USSR and China.

Ivan Petrovich Pavlov extended the definitions of the four temperament types under study at the time: phlegmatic, choleric, sanguine, and melancholic, updating the names to the strong and impetuous type, the strong equilibrated and quiet type, the strong equilibrated and lively type, and the weak type. He observed and began the study of trans-marginal inhibition (TMI), the body's natural response of shutting down when exposed to overwhelming stress or pain by electric shock. He became as a symbolic figure for USSR to complete with biomedicine from Western countries (especially after Lysenkoism was proved incorrect), Soviet neurology and psychiatry were all based on Pavlov's theories, moreover, came numerous dramas and novels on Pavlov, some of which was translated into Chinese.²⁰

Pavlovian science in China

Since 1949, the new régime lead by Chinese Communist Party (CCP) had never stopped finding ways to legitimize itself. Besides its plentiful mass movements in political area, the new-born government tried to

¹⁹Lin Qiaozhi, one of the most famous obstetrician in China, thought physicians had already used PPM before it was introduced to China, though may lack a systematic understanding of it. See Wu Chongqi, Deng Jiarong, Lin Qiaozhi zhuan, Beijing: Zhongguo qingnian chubanshe, 1985, 277-286.

¹⁰Babawa, *Ba fu luo fu*, Beijing: Xinhua shudian, 1950.

build a new system of natural science by importing Soviet science and technology. Among various Soviet scientific theories adopted in China, Lysenkoism and Pavlovism were the most important ones. Lysenkoism, named after its founder, T.D. Lysenko, denied the validity of classical genetics from Mendel to Morgan and promoted its own theory of heredity, based on the belief that acquired characters could be inherited. With the aid of Soviet advisors, it quickly gained hegemony in the biological sciences, and brought a "twisted path" for the development of genetics in China.²¹

The expansion of Pavlovism repeated the trajectory of Lysenkoism to some extent. However, unlike the latter, Pavlovism never faced big challenge until today,²² and was practiced in various ways, ranging from surgery to psychiatrics, from philosophy to obstetrics²³, was practiced in breathing and even sleeping. Thus, Pavlovism has already exceeded the boundary of neurology, and become a universal principal of science. We may call it Pavlovian science.

Starting from 1949, Pavlov's theories had been introduced into China; plenty of books on Pavlovism were published in a short time,²⁴creating a whole new system of neurology and medical treatment based on Pavlov's theories, which lay a foundation for the promotion of PPMD later on.

Among Pavlovian theories, the idea of the second signal system (di er xin hao xi tong) is the key concept to build PPMD. Pain in childbirth, according to PPMD, was a production stimulated by the second signal system. Pavlov claimed that the basic activity of cerebral cortex was signal movement, which could be divided into two categories: the first signals referred to specific, direct stimulus, like lights, sounds and

²¹L.A. Schneider, "Learning from Russia: lysenkoism and the fate of genetics in China, 1950-1986", in Denis Simon and Merle Goldman eds., *Science and technology in post-mao China*, Cambridge: Harvard University Press, 1989.

²²While Lysenkoism has become a scandal in history of science, Pavlov still remains a respectable scientist in text books. Indeed he was a truly scientist, different from Lysenko, who's been regarded as a fake geneticist.

²³Liu Guolong, "Ba fu luo fu gaoji shenjing huodong xueshuo ji qi ying yong (巴甫洛夫高級神經活動學說及其影響)", in *Zhongji yikan*, 1954 Vol.4-1955 Vol.7.

²⁴See Babawa, *Ba fu luo fu*; Zhang Qiong, *Ba fu luo fu gaoji shenjing huodong xueshuo jiben jiaocheng*(巴甫洛夫高級神經活動學 說基本教程), Beijing: Renmin weisheng chubanshe, 1953; *Ba fu luo fu xueshuo xuexi tigang*(巴甫洛夫學說學習提綱), Beijing: Renmin weisheng chubanshe, 1954; *Ba fu luo fu xueshuo yu ertong xinlixue*(巴甫洛夫學說與兒童心理學), Beijing: Zhongguo kexueyuan, 1954; Zhang Yibin, *Ba fu luo fu xueshuo de laiyuan yu fazhan*(巴甫洛夫學說的來源與發展), Beijing: Zhonghua quanguo kexue jishu puji xiehui, 1955;

flavor; the second signals were abstract stimulus, namely the words. Unlike the first signal system, which was shared by both human and animal, the second system was the unique feature of human beings, was "the signal from the first signal system"²⁵.

For this theory was easier to understand than other Pavlovian ideas, as well as its strong connection with words instead of biological phenomena made the second signal system an idea politicalized item. Political leaders' words were frequently quoted to summarize its characteristic²⁶, at the same time this theory was widely used in political propaganda.

Sulian Wutong Fenmian Fa (Psycho-prophylactic method of delivery) in China

On May 16th, 1952, *Rinmin Ribao* published an introduction of PPMD written by Dr. Liu Minying, a pioneer in promoting this method. Liu started the article by discussing the nature of pain in childbirth. Previous physicians and obstetricians, in Liu's eyes, all treated labor pain as an inherited biological phenomenon. Because they saw almost every woman got delivery in pain, they confirmed that childbirth pain was natural and inherited based on observation and clinical experiments. Hence they not only didn't care about women's suffering, but also regarded labor pain a positive signal of childbirth. Soviet physicians, on the contrary, regarded labor pain as acquired pathology. Moreover, women having childbirth in PPMD felt little or no pain at all. Dr. Liu came up with a question: why did labor pain happen?

The answer lies in Pavlov's most famous theory "conditioned reflex": cerebral cortex, using conditioned reflex, could either suppress pathogenic factors or turn non-pathogenic factors to have pathogenic

²⁵Ba fu luo fu xueshuo xuexi tigang, Beijing: Renmin weisheng chubanshe, 1954.

²⁶Pamphlets used words of Stalin(language is one of powers that help human stand out of animals and come into society, fight with nature to achieve our progress today) and Engels(language is produced in and with labor) to generalize the nature of the second signal system. Ibid.

effects". That's to say, the childbirth was supposed to be painless, however the conditioned reflex caused cerebral cortex to regard it as painful. But why did conditioned reflex happen? According to Dr. Liu, this still could be explained by another Pavlovian theory "the second signal system": some women in ancient times might accidentally suffer from labor pain, other women, inspiring by this, began to regard childbirth as painful. This idea spread around the society, framing a "linguistic conditioned reflex of labor pain". This was the historical root of labor pain.²⁷ And the way to avoid labor pain was just to establish another conditioned reflex which contradicted the former one: by educating women that childbirth was supposed to be painless, cultivating a linguistic conditioned reflex that make cerebral cortex treat labor as painless, thus women would not feel any pain again.²⁸

As the first article on PPMD after 1949²⁹, Dr. Liu's introduction on PPMD became the classic model of teaching and explaining PPMD to ordinary people. Texts appeared later on all followed his narrative: firstly stated the common sense that women all thought childbirth was painful, and then used Pavlov's conditioned reflex theory and second signal system to explain, at last reached an conclusion that women should give birth without pain if they strongly believed in the new regime and followed physician's guides.³⁰

Hospital of Shanghai Junyi Daxue was the first medical institute that carried out experiments on PPMD in China, however, Dr. Liu Minying, vice chair of Hospital of Tianjin Junyi Daxue, became the leader promoting this new method. Dr. Liu published a serial of talks on PPMD "Wutong fenmianfa jianghua" on *Renmin Ribao³¹*, edited two books³², and gave speeches around.

²⁷Liu Minying, "Sulian de wutong fenmian fa (蘇聯的無痛分娩法)", *Renmin ribao*, May 16th, 1952. ²⁸Ibid

²⁹Actually, PPM was introduced into China before the foundation of PRC; however it did not have much influence. See "Sulian pubian caiyong wutong shengyu xinfa(蘇聯普遍採用無痛生育新法)", "Wutong shengyu xinfa(無痛生育新法)", *Funv yuebao*, 1936, Vol.2 No.5. Zhu Bingsheng, "fenmian wutong fa zhong zhi shenglixue qushi", *Sulian yixue*, 1947 Vol.5.

³⁰Based on all the publications I've read (including five on PPM and nearly twenty including PPM), all of them used the same narrative, stressing the rightness of Pavlov and the legitimacy of new regime.

³¹Dating from July 16th to 19th, 1952. This long article (published in four parts) was reprinted in every book on PPM.

Dr. Liu's publications are highly politicalized. He created a strong contradiction between the China before and after 1949. Women in "old society" could only endure the pain while physicians at that time often just turned their back to this; but women in the new nation could benefit from the advanced Soviet method which released them from past nightmares. And the way to women's emancipation relied on women's belief and physician's kindness. Ironically, Pavlovian theories, the guarantee of PPMD, were just treated as the background; the key to a painless labor was the cooperation between mother and doctors, and the trust for the new born government. Teaching PPMD, in Liu's words, was "really simple", "just invite physicians, midwives or nurses with high reputation to give talks or lessons to lying-in women. The content of class involves explain causes of labor pain; process of childbirth; feelings during different stages of childbirth; how to cope with physicians and how highly developed obstetrics guarantee the safety of mother and fetus", "class begins a month before the childbirth, and would be given five or six times"³³. The Pavlovian theories appeared as a much simplified version in text books for women, compared with medical journals. But it's questionable that if women at that time could truly understand what they were taught.³⁴ Thus in the practice of PPMD, the focus of both women and physicians shifted from on understanding PPMD to on respecting each other and having faith on "new subject", which could be regarded as a political principle beyond medical area. Learning PPMD was equal to believe in communist power.

In June, 1952, Ministry of Health began to call on all local health organizations and hospitals to study the PPMD. "PPMD", according to the anouncement, "is a model of how Soviet physicians combined

³²Wutong fenmian fa (Tianjin: Jinbu ribao she, 1952), Ba fu luo fu gaoji shenjing huodong xueshuo (Beijing: Zhonghua shuju, 1954). ³³Liu Minying, "Sulian de wutong fenmian fa (蘇聯的無痛分娩法)". The length of class was just based on Soviet experience. See Masilakoufu, "Pubian de dui yunfu shishi wutong fenmian zhi jingshen yu yufangxing xunlian de jingyan (普遍的對孕婦實施無痛分 娩之精神與預防性宣傳的經驗)", in Sulian wutong fenmianfa, Shenyang: Dongbei yixue tushu chubanshe, 1952.

³⁴Documents showed for the eighty-four women using the PPM, only 8 of them attended college, and more than of them didn't attend middle school. "Shanghai yixueyuan fuchan kexueyuan tuixing wutong fenmianfa 100 li de chubu tongji (上海醫學院婦產科學院推 行無痛分娩法 100 例的初步統計)", *Wutong fenmianfa wenxian xubian*, Shanghai: Huadong yiwu shenghuo she, 1952.

Pavlovian theories with clinical reality. And it works quite well according to experiments carried out in hospital of Shanghai Junyi Daxue".³⁵

Media reports showed that this movement had taken place in big cities like Beijing, Tianjin, Shenyang, Xi'an, Shanghai, Chengdu and Guangzhou. These reports all gave highly positive judgments on the campaign, reaching a success rate at over 80%. Meanwhile, archives described the movements in a little different way.

Take Tianjin as an example³⁶, the department of public health quickly organized a committee to promote PPMD in June, which consisted of department of public health, Hospital of Tianjin Junyi Daxue, women's federation, public and private hospitals, labor union, experts and association of friendship between Sino and Soviet.

The committee was supposed to hold conference every month, being responsible of organizing propaganda, training physicians and nurses and research PPMD. The government held training programs which aimed at training physicians, nurses and related staff, and invited famous experts such as Dr. Liu to give talks. Trainees were required to organize seminars to discuss questions they encountering during the study. After physicians and other staffs were trained, it's their turn to educate pregnant women. They taught lesson once and twice a week a month before the delivery, telling women the principal of PPMD and childbirth, how to take care of themselves during pregnancy. After class, future mothers and their spouses had to attend seminars to get answer to their questions (if any).For the key to painless birth was the puerpera's trust in PPMD, pregnant women were supposed to get in touch with physicians whenever they needed. Thus the committee organized a huge network of medical practitioners to communicate with

³⁵"Weishengbu fachu guanyu tuixing wutong fenmianfa de tongzhi (衛生部發出關於推行無痛分娩法的通知)", *Renmin ribao*, July 14th, 1952.

³⁶Tianjin and Shanghai have the richest storage of archives on PPM, and Tianjin it's where Dr. Liu Minying, the celebrity in the campaign, worked.

future mothers and their relatives.

Detailed plan seemed to reach a positive outcome: a success rate over 80% (4207 out of 4596) (though a small portion compared with all the childbirth given this year). However, more problems arose. Firstly, limited space to offer PPMD lessons or give childbirth. Some work units didn't offer room for PPMD lessons and hospitals didn't have enough delivery room. Secondly, deficient medical practitioners. This made puerpera get nervous thus would effect the PPMD. Thirdly, poor participation. Many women refused to take courses when the temperature got down. Some practitioners also couldn't give lessons on time. Lastly, lack of perseverance. The promotion was often regarded as a political movement (though it actually was), thus it could not last long.

However, when mentioning the cause of failure, the committee just blamed mothers and practitioners themselves, instead of objective reasons mentioned above. Suspicion of PPMD, lack of trust and mothers' anxiety were often accused of as contributing to failure. ³⁷

Facing various obstacles during the campaign, this Soviet method was not in the end "seriously practiced in China's delivery rooms, and women in childbirth did not really receive any substantial benefit from it".³⁸ On the contrary, the campaign focused on political propaganda instead of clinical practice. It articulated that the pain in childbirth could be eliminated by retaining a harmonious relationship between women in childbirth and obstetricians, and women were supposed to have a easy delivery if they truly believed in the government. Moreover, media press were asked to create a "painless" language environment in order to avoid pain in an linguistic way. The word "zhen tong (陣痛)" (repetitive pains)

³⁷Based on "Gonggong weisheng ju guan yu tianjin shi lianhe fuyou baojianzhan zuzhi banfa de qingshi ji benfu pishi (公共衛生局關 於天津市聯合婦幼保健站組織辦法的請示及本府批示)", Tianjin Municipal Archive, X0053-D-001530; "guanyu mianfei jiesheng banfa wenjian (關於免費接生辦法文件)", X0191-C-000044-006; "weishengju guanyu chengli jiangxisuo jishu ganxiao xueshu yanjianghui ji xunlian jieshengpo banfa zongjie (衛生局關於成立講習所技術幹校學術演講會及訓練接生婆辦法總結)", X0191-C-000044-006; "Gonggong weisheng ju guanyu Tianjin shi wutong fenmian fa tuixing weiyuanhui zuzhi dagang de baogao ji wutong fenmian gongzuo baogao", X0053-D-001534.

³⁸Byungil Ahn, "Reinventing scientific medicine for the socialist republic", *Twentieth-Century China*, Vol.38. No.2, pp. 139–155, 2013.

refers to uterine contraction occurring in childbirth, which is usually used as an indicator of the first stage of childbirth. During the campaign of PPMD, it was replaced with "zhen suo (陣縮)" (repetitive contraction) ³⁹because PPMD had proven that delivery was painless; this change "will not only benefit our work, but also stick to the truth". The phrase "jie tong shou fa (解痛手法)" (gestures to relief pain) was changed as "zhu chan dong zuo (助產動作)" (moves to help delivery) just to avoid the word "tong" (pain); "ya po zai zui bu shu fu de di fang (壓迫最不舒服的地方)" (press the most uncomfortable area) replaced the phrase "ya po tong dian (壓迫痛點)" (press pain point) ⁴⁰. For PPMD could not guarantee a painless childbirth, meanwhile propaganda tried to depict it as an almighty method, a dilemma appeared: how to deal with painful childbirth? The answer is labeling them as "irregular childbirth". Media articulated that normal childbirth was supposed to be painless, in other words, for women who experienced labor pain, they were having an irregular delivery.

Physicians and obstetricians had to choose their sides during the movement, especially those who received education from "Western" countries. Famous doctors like Lin Qiaozhi and Liu Benzhen had to expressed their appreciation of the new method, as well as criticizing " bourgeois" medicine from "Western countries". At the same time, physicians of TCM were eager to proving their expertise and apparatus could assist the practice of PPMD, by misinterpreting TCM classics intentionally. Obstetricians who studied in USSR were busy publishing articles and giving lectures. The campaign of PPMD presented the changing boundaries between PPMD, biomedicine and so-called Soviet medicine. While

³⁹"Zhen tong" first appeared in medical books in Tang dynasty, it became the only phrase to describe uterine contraction afterwards. Medical books published before the campaign of PPM all used the phrase "zhen tong", meanwhile those published after 1952 adopted the new phrase "zhen suo". However, both two phrases are used today. For example, Liu Liben's *Yunfu baoyang fa*(孕婦保養法), which was published at the end of 1951 still used the word "zhen tong", however, all of his publications (whether in relation with PPM or not) after 1952 began to use "zhen suo". The phrase "jie tong shou fa" (gestures to relief pain) was changed as "zhu chan dong zuo" (moves to help delivery) just to avoid the word "tong" (pain); "yap o zai zui bu shu fu de di fang" (press the most uncomfortable area) replaced the phrase "ya po tong dian" (press pain point). see Hu Hongyuan, Zhao Yanan, "Shishi wutong fenmian fa shi ying zhuyi de jijjian shi(實施無痛分娩法時應注意的幾件事)", *Wutong fenmian jiangyi*, Shanghai: Huadong yiwu shenghuo she, 1952; *Jiang Kang Bao*, Vol.242, 1952.

⁴⁰Hu Hongyuan, Zhao Yanan, "Shishi wutong fenmian fa shi ying zhuyi de jijian shi.

TCM was combined with PPMD, biomedicine was "banished" from the delivery room. Ironically, the movement of learning from TCM and rectification movement later on changed the medical boundary again, TCM became orthodox and PPMD became a symbol of dogmatism of learning from USSR.

Changing medical boundaries

In *Silent boundaries*, Karen Pliskin illustrates a interesting phenomenon: Israel physicians often have difficulty in communicating with their Iranian patients, while the patients are unable to explain their symptoms, physicians can't discover any sign either. In the end, doctors' unsuccessful prescriptions only lead to patients' complains. Thus Israel physicians invent a word to describe these Iranian patients—the Persian syndrome⁴¹. Afterwards, they use "the Persian syndrome" to label their Iranian patients whenever they can't understand them.

Pliskin indicates that "the Persian syndrome" results from discrepancy of medical knowledge between different cultures. Iranians' symptoms are often the somatization of "narahati"(distress), which origins from culturally maladjustment of living in Israel. While Israel doctors who have no knowledge of "narahati" can't diagnose or cure their patients.⁴² Pliskin believes that exchange and interaction of medical knowledge are frequently shaped by social and cultural factors which can't by discovered by participants. Therefore, these factors create silent boundaries between individuals and communities belonging to different cultures.⁴³

These silent boundaries also exist in campaign of PPMD in 1950s China, some of them were created to set boundaries, while some boundaries were overlooked or broken through on purpose.

⁴¹Karen Pliskin, *Silent boundaries: cultural constraints on sickness and diagnosis of Iranians in Israel* (New Haven: Yale University Press, 1987), p6.

⁴²Karen Pliskin, pp.45-78.

⁴³Karen Pliskin, p8.

During the campaign, a inevitable question is which medicine foundation was PPMD built upon. There were three knowledge of medicine in 1950s China: Traditional Chinese Medicine, Biomedicine and "Soviet medicine". PPMD is supposed to be categorized in biomedicine and has little connection with TCM. However, during the campaign, CCP neglected boundaries between PPMD and TCM, while creating discrepancy between PPMD and biomedicine instead.

1 Invented traditions: TCM and PPMD

The primary mission for CCP after 1949 is to legitimize its ruling, and public health realm is an ideal platform to prove itself. From Patriotic sanitation campaign⁴⁴ to leprosy control⁴⁵, CCP tried to improve public health in a short time, and in a way of mass movement. Aside with campaign, the new-born regime also seek a new science system unlike the old one in Republican China, namely the Soviet model. Pavlovian theories were chosen as the foundation of medicine and biology.

TCM had been fiercely criticized as "unscientific" since Modern China. However it revived in 1950s after the new regime abandoned the "bourgeois" Western medicine in order to create an alternative model of modernity. Following Mao Zedong's call, the whole nation witnessed a campaign of learning TCM from mid 1950s.⁴⁶ TCM experienced a transition from a discriminated subject to a leading role (over biomedicine). From 1955 to 1960, 239 articles were published on medical journals articulating that doctors of Western medicine should learn from their TCM colleagues.

The boundary between TCM and PPMD was frequently blurred during the campaign of PPMD, nonetheless such boundary crossing were often against the principal of medical knowledge.

Zhao Xiyang's《將<達生篇>介绍給婦產科同志》(Introducing Dashengpian to obstetricians) compared

⁴⁴See Ruth Rogaski, "Nature, Annihilation, and Modernity: China's Korean War Germ-Warfare Experience Reconsidered", *The Journal of Asian Studies* (Vol. 61, No. 2, 2002), pp. 381-415.

⁴⁵See Angela Kiche Leung, *Leprosy in China: a history*, Columbia University Press, 2009.

⁴⁶Anti-discriminate TCM papers came out until 1955: Gu Wangguan "在中級醫務人員中反對歧視中醫的資產階級思想!",中級 醫刊, Vol.6, 1955;程之范,批判王斌歧視中醫的錯誤思想,正確接受祖國醫學遺產,科學通報, Vol.4, 1955. Therefore TCM still ranked below biomedicine at that time, and physicians of TCM were often descriminated by their collegues of biomedicine.

Dashengpian, a classical TCM work on childbirth with PPMD, indicating that they had much in common, and *Dashengpian* could be used as a reference when practicing PPMDD. The author misinterpreted the TCM classic to match the principal of PPMD: there ought to be no pain. While *Dashengpian* suggested women to sleep and stand labor pain during childbirth, Zhao explained "stand labor pain" as "the pain is not severe", and considered *Dashengpian* a perfect match of PPMDD. ⁴⁷

Besides echoing Soviet method theoretically, TCM also participated in PPMD campaign in practice. Acupuncture was first used to assist PPMD, however it replaced the Soviet method in the end. From mid 1950s, Sun Yat-sen medical school began to apply acupuncture in PPMD and achieved "positive results". According to physicians, such achievement was only made possible under the leader of CCP and only should be used as a assistance to PPMD.⁴⁸

However, along with the ongoing campaign of learning from TCM and the vanish of PPM, TCM began to take charge of pain control in delivery room. In 1959, Xi'an medical school invented electro acupuncture to relieve labor pain, which was regarded as "a treasure of TCM and a development of acupuncture ", neglecting PPMD.⁴⁹

Qigong 氣功, a system of deep breathing exercises was also used to aid PPMD. Nanjing nursing school applied Qigong in delivery and reached a 95% success rate because "both PPMD and acupuncture are difficult to practice".⁵⁰

There ought to be a specific boundary between TCM and PPMD, while campaigns of learning from TCM and Soviet medicine diminished that boundary and let TCM to widely participate in practice of PPMD.

⁴⁷Zhao Xiyang, "將<達生篇>介绍給婦產科同志"(Introducing *Dashengpian* to obstetricians), 中醫雜誌 (Journal of TCM), Vol.2, 1955.

⁴⁸Sun Yat-sen medical school, 針刺法輔助精神預防性無痛分娩法初步報告(Preliminary report on acupuncture's assistance of PPMD), 針灸研究專刊(*Journal of acupuncture*)(internal material), 1960.

⁴⁹Xi'an medical school, 電針無痛分娩(electro acupuncture method of delivery), 西安醫學院學報(Journal of Xi'an medical school), Vol.6, 1959.

⁵⁰Nanjing nursing school, 氣功無痛分娩四十例報告(Report of 40 cases using Qigong in painless labor), 江蘇中醫(TCM in Jiangsu province), Vol.11, 1960.

PPMD is mainly supported by propaganda and mass movement instead of a theoretical framework, therefore it could easily coexist with other medical knowledge.

2 Changing knowledge: biomedicine in campaign of PPMD

According to CCP in 1950s, Soviet medicine should be different from "bourgeois", "Western" biomedicine, thus the campaign of PPMD drew a boundary between biomedicine and the Soviet method. Physicians who had a biomedicine background were required to start over learning Soviet medicine.

Dr. Chen Benzhen, chair of central nursing school at that time, wrote about his understanding of PPMD: "my understanding of PPMD could be divided into three stages, I resisted and discriminated it from 1949 to 1951; while I began to regard it as a useful tool since land reform in 1951, but at that time I still doubted its feasibility; the visiting of Tianjin Junyi Daxue in 1952 finally changed my understanding of PPM, I made my mind to promote it in Central Nursing School".

Chen had to reveal his attitude under tremendous political pressure, but supporting PPMD was not enough, Chen should drew a line between him and biomedicine as well. "as a graduate of Union Medical College, I received poisonous American education which prevented me from receiving advanced Soviet medicine". While a two days tour in Tianjin gave him a deep understanding of PPMD "I truly believe that PPMD cannot be done in old society, however our new government enables delivery a mission of glory instead of a women's burden". It's difficult to judge whether Chen wrote this article as a political task or not, but he did cast doubts on PPMD, in a subtle way. When describing himself before 1952, Chen wrote: "I keep silent when other people talk about achievements of Soviet medicine, but what I am thinking is "these stuff have already been done in Western countries, how could them be patented by USSR" or "

⁵¹Chen Benzhen, "我對無痛分娩法認識的初步轉變" (Tentative transition of my understanding on PPMD), 蘇聯無痛分娩法 (PPMD), pp.104-108.

Chen blamed himself in the past, but he might also show his dislike of propaganda used to promote PPMD.

PPMD also confused obstetrician Lin Qiaozhi. As one of the most famous obstetricians at that time, Dr. Lin's attitude is really crucial to PPMD campaign. Graduating from Union Medical College, Lin was the first Chinese chair of department of obstetrics of Union Hospital in Republican China. PPMD was brand new to her.

Compared with Chen Benzhen's reluctant attitude, Dr. Lin responded to PPMD in the first time. When other doctors were suspicious about whether Lin could accept PPMD, Lin decided to apply PPMD to all deliveries. "Other hospitals have applied PPMD while my prejudice lag us behind", she told to a journalist, "I was under influence of Western culture, which blocked me understanding Soviet medicine. I used to overlook Soviet medicine, considering it incompatible with Western medicine, thus I seldom communicate with Soviet physicians. Such prejudice has a negative effect on my understanding of nature of subject. In fact, the Soviet medicine has made big achievements and PPMD is quite useful in delivery". In order to read Soviet papers, Lin took a break to register a Russian class. She encouraged other obstetricians to learn PPMD and visited USSR later on.

Lin Qiaozhi is definitely more active in promoting PPMD than Chen Benzhen, meanwhile she also doubted this new method, using euphemism. In a workshop introducing experience of using PPMD, Lin said that "we all know that lying-in women are subject to mental status to some extents, we used to teach them to take deep breath and relax, telling them not be afraid of labor pain. And we might use anesthesia at the same time. In fact, what we did in the past is exactly PPMD, we just did them involuntarily. "⁵² Lin indirectly indicated that PPMD was nothing new but a production of theories and propaganda. It's a pity

⁵²Wu Chongqi, Deng Jiarong, 林巧稚傳(biography of Lin Qiaozhi), Beijing: Zhongguo qingnian press, 1985, pp277-286.

to witness physicians had to give up what they learnt in the past and start to learn Soviet medicine from the beginning.

Besides self-criticizing, physicians of biomedicine had to take responsibility of compiling text books to promote PPMD during the campaign. Dr. Lin Sixin's 產科學及護理(Obstetrics and care)⁵³, used a whole chapter to introduce PPMD, not only its principal, but also its operating procedure⁵⁴. Examined by Lin Qiaozhi, 產科學及產科技術(Obstetrics and technology)⁵⁵, employed one section for introduction.⁵⁶

Translations of biomedicine works were also required to add propaganda of PPMD. When Dr. Liu Benli translated English physician Paul Titus's *The management of obstetric difficulties*, he had to articulate that "the original work's ideas on anesthesia are against Pavlov's theories and wrong"⁵⁷ and add a extra chapter to recommend PPMD. As a graduate of Shanghai Medical School and John Hopkins, Liu Benli also wrote a manuscript to recommend PPMD⁵⁸.

While physicians with a Western background had to say goodbye to their past, someone who master Russian went into rapture at the campaign.

As early as 1947, Dr. Zhu Binsheng had published translations like 分娩無痛法 (painless childbirth) and 分娩無痛法中生理學趨勢 (Physiological trend in painless childbirth)⁵⁹, advocating PPMD. He became a pioneer after the campaign by compiling books like 無痛分娩法文獻 (Literatures on PPMD). This article has no intention of judging physicians during the campaign. Some of them were reluctant and suspicious, some were eager to express themselves, some devoted themselves to practice, while some were busy writing book. We never know whether their actions were threatened by political pressures or

⁵³Lin Sixin ed. 產科學及護理(Obstetrics and care), Beijing: Renmin weisheng press, 1953.

⁵⁴see 產科學及護理(Obstetrics and care) pp.31-35.

⁵⁵Zhou efen ed.,產科學及產科技術(Obstetrics and technology), Beijing: Renmin weisheng press, 1954.

⁵⁶see 產科學及產科技術(Obstetrics and technology), pp.113-116.

⁵⁷Liu Benli, "introduction",產科學疑難問題處理法 (*The management of obstetric difficultie()*, Beijing: Renmin weisheng press, 1955.

⁵⁸Liu Benli, 孕產期保健講話(Address on prenatal care), Beijing: Renmin weisheng press, 1954.

⁵⁹Zhu Binsheng, "fenmian wutong fa", "fenmian wutong fa zhong zhi shenglixue qushi", *Sulian Yixue*, Vol.5,1947.

their true thought. What we know is most of them still cling to their identity as physicians and made contributions to successful deliveries.

Epilogue

Successfully drawing attention of obstetrics in the post-World War II,⁶⁰ pain in childbirth is still supposed to be a personal experience. However, it became a method to legitimize the new regime in a new political environment, transiting its nature from individual feeling into political symbol. This unique pain was no longer a private memory but a shared political discourse instead. For women in delivery, they lost their right to express the pain; for physicians and obstetricians, the elimination of pain connected closely with their political future.

Unfortunately, over-politicalized practice excluded women and objectivity of medicine during the campaign, producing a "Lysenkolized" tragedy. And we cannot figure out how much pain those women felt under PPMD, under that "painless" environment.

From anesthesia/analgesia to PPMD, the history of delivery in Modern China witnessed a transition from biomedicine to so-called "Soviet medicine". The female's subjectivity was discovered at first but ended up with being buried by political forces. For Lamaze method was built upon PPMD, both women in China and some parts of US and Western Europe were actually reproducing in the same way, despite the opposite motivation at the beginning. In 1950s China, the discourse of nationalized delivery still existed while female's subjectivity had already vanished. Women would still feel the pain, however they lost their right of expressing it.

⁶⁰William Arney, Jane Neill, "The location of pain in childbirth", *Sociology of health and illness*, Vol.4, No.1, 1982.