International Journal of Women's Health

Dovepress
Taylor & Francis Group

Open Access Full Text Article

ORIGINAL RESEARCH

Journey Mapping of Chinese Women Undergoing Termination Due to Fetal Abnormalities: A Thematic Content Analysis Based on Social Media Diaries

Chaojin Da[1,2], Junfang Shi[3], Peifen Ma[3,4], Chen Wu[1], Yuxin Zhang[2], Qiongfang Cui[3], Miao Wang[5], Aili Zhang[2], Haozhi Xia[6], Tingting Cai[6]

[1]School of Nursing and Rehabilitation, Shandong University, Jinan City, Shandong Province, People's Republic of China; [2]Department of Nursing, School of Clinical Nursing, Gansu Health Vocational College, Lanzhou City, Gansu Province, People's Republic of China; [3]School of Nursing, Lanzhou University, Lanzhou City, Gansu Province, People's Republic of China; [4]Nursing Department, Lanzhou University Second Hospital, Lanzhou City, Gansu Province, People's Republic of China; [5]School of Nursing, WanNan Medical College, Wuhu City, Anhui Province, People's Republic of China; [6]School of Nursing, Fudan University, Shanghai City, People's Republic of China

Correspondence: Tingting Cai, School of Nursing, Fudan University, No. 305 Fenglin Road, Shanghai, 200032, People's Republic of China, Tel +86 19821832038, Email caitingtingguo@163.com

Purpose: The psychological consequences of pregnancy termination due to fetal abnormalities demonstrate stage-specific characteristics among affected women. With the development of the Internet, social media has increasingly become a significant channel for documenting and sharing health-related experiences. Utilizing journey mapping, this study systematically analyzes self-documented online diaries to explore the experiences of women undergoing induced abortions due to fetal abnormalities across different phases.

Patients and Methods: We manually searched three mainstream Chinese text-based social media platforms—Douban, Zhihu, and Jianshu—to collect abortion diaries from user homepages. An interpretative phenomenological thematic content analysis was used to develop journey maps.

Results: A total of 278 diaries from 35 users were analyzed, focusing on the experiences of women undergoing pregnancy termination due to fetal abnormalities, which were divided into four phases: diagnostic, inpatient abortion, puerperium, and post-puerperium. Three main themes emerged in each phase: psychological experiences, coping strategies, and post-traumatic transformation. Ten subthemes were identified: grief, emotional responses, self-blame and guilt, cognitive adjustment, seeking social support, recovery, growth, avoidance behaviors, emotional regulation, and shifting attention. Avoidance behaviors occurred in all phases except the puerperium, emotional regulation was present only during inpatient abortion, and shifting attention appeared solely in the puerperium. The remaining subthemes were present across all phases, with varying frequency.

Conclusion: Women's psychological experiences, coping strategies, and post-traumatic transformations vary across stages, highlighting the need for personalized and adaptive nursing care.

Keywords: experiences, women's health, induced abortion, fetal abnormalities, journey map, social media

Introduction

With the increase in older pregnant women, changes in living environments, advancements in prenatal diagnostic technologies, and improvements in birth defect surveillance systems, the incidence and detection rates of fetal abnormalities have been on the rise.[1–4] Annually, over two million pregnancies are terminated due to fetal anomalies,[5] with many women opting for termination upon diagnosis of fetal malformations. In the United Kingdom, approximately 37% of pregnant women choose termination following a diagnosis of fetal abnormalities, whereas this figure reaches up to 90.7% in China.[6,7]

Received: 30 November 2024
Accepted: 15 May 2025
Published: 17 June 2025

For mothers, choosing to terminate a pregnancy due to fetal anomalies is a significant source of psychological stress. The experience of this process, from initial diagnosis to post-abortion recovery, is often complex and dynamic. In traditional Chinese culture, pregnancy is regarded as an important family event, and fetal abnormalities are frequently accompanied by social stigma.[8,9] Furthermore, cultural restrictions on emotional expression and insufficient communication within families contribute to the substantial psychological pressure faced by women who undergo termination due to fetal deformities.[10] Additionally, the traditional practice of "zuo yue zi"(confinement after childbirth) limits postpartum women's activities, which may exacerbate their feelings of loneliness and psychological burden.[11,12]

Current studies primarily employ questionnaires or interviews to explore the negative emotions and experiences of these women.[6,13] Findings indicate that such stressors can lead to psychological reactions, including grief and loss.[14] The likelihood of depression among women who undergo termination is four times greater than that of women with normal pregnancies, while the incidence of post-traumatic stress disorder is seven times higher.[15] This negative emotional experience is not transient; it may persist for two to six years following termination.[16] However, existing research tends to focus on specific stages of women's experiences. Moreover, due to the cultural sensitivity surrounding induced abortion due to fetal anomalies, many women may be reluctant to openly discuss these issues with healthcare providers, potentially limiting the information available to researchers.[10] Consequently, the generalizability of these findings is restricted, and they may not fully represent women's experiences throughout the entire process.

Social media has become a crucial platform for women to express themselves, obtain information, and seek emotional support.[17,18] Through posting and writing online diaries, women generate user-generated content that captures personal experiences and facilitates self-reflection,[19] thus becoming an important data resource for research on women's issues. For instance, Feng et al conducted sentiment analysis on pandemic diaries shared on Weibo, finding a negative correlation between women's emotional valence and comment behavior.[20] Sormunen et al analyzed content from Swedish infertility blogs to explore the life experiences of infertile women.[21] Helen M. Jones et al examined pregnancy and postpartum posts on Instagram, emphasizing the need for diverse body representation in media to reduce weight stigma.[22] For women choosing to terminate pregnancies due to fetal abnormalities, the anonymity and convenience of social media diaries allow for more authentic and continuous emotional expression. Thus, online diaries provide researchers with a novel perspective to explore the complete experiences of these women from the diagnosis of fetal abnormalities to postpartum recovery.

Journey mapping originated from market research and service design, aiming to integrate multiple data sources to optimize customer experience and achieve profit growth.[23] Its distinct advantage lies in effectively organizing complex, multi-source data and exploring interactive events across different contexts and time frames, leading to its increasing recognition and application in the healthcare field.[24] Researchers typically employ methods such as thematic analysis, observation, and interviews to construct patient journey maps for a deeper understanding of patient experiences. For instance, Fennelly et al[25] conducted semi-structured interviews with ten patients suffering from rheumatic diseases and used thematic analysis to extract data, visually illustrating patients' experiences and perspectives after receiving therapy. Similarly, Ciria-Suarez[26] performed semi-structured interviews with 21 breast cancer patients and 21 breast cancer survivors, employing thematic analysis to create journey maps depicting patients' healthcare experiences at various stages. Therefore, journey maps offer significant advantages in exploring and presenting the experiences of women undergoing termination due to fetal abnormalities at different stages.

Therefore, this study aims to gain an in-depth understanding of the overall experiences of women who undergo termination of pregnancy due to fetal abnormalities by analyzing their diaries documented on social media. The findings will be presented in the form of journey maps, providing valuable insights for healthcare professionals to develop comprehensive care plans tailored to the needs of these women throughout their journey.

Materials and Methods

Study Design

An interpretative phenomenological thematic content analysis was used for this exploratory study to analyze social media diaries. IPA is an ideographic approach that emphasises the personal sense-making of the experiences. IPA is a helpful

approach many healthcare researchers adopt to allow others to learn from individuals' experiences whilst also acknowledging the subjectivity of interpretation, that the researcher's experiences may impact interpretation.[27]

Sample and Data Collection Methods

In the initial phase of this study, the keywords "abortion diary" and "abortion record" were systematically searched via the Baidu search engine. These terms were selected based on preliminary observations of user-generated content on Chinese social media platforms, where women explicitly employed phrases such as "A Record of Induced Labor at 37 weeks in a Woman of Advanced Maternal Age", "38 weeks + Induced Abortion Diary", or "An Expectant Mother's Diary: Induced Abortion at 8 weeks" to title or categorize their personal narratives.

Search results indicated that such diaries were primarily published on three social media platforms: Douban, Zhihu, and Jianshu. These platforms not only host a significant number of diaries but also exhibit high continuity and quality of content.[28] Zhihu, with over 400 million registered users, is one of China's most influential knowledge-sharing platforms. Douban, with seven million daily active users, serves as a major hub for opinion leaders and cultural exchange. Although smaller and less active, Jianshu is renowned for its high-quality original content and creative contributions. Therefore, Douban, Zhihu, and Jianshu were selected as the primary data sources for this study. The researchers then conducted text searches on the selected platforms using the same keywords, independently evaluated the results, and collected all publicly available diaries, covering the period from December 26, 2018, to May 26, 2023, related to "abortion" from eligible user profiles.

Inclusion and Exclusion Criteria

Inclusion required posts to (a) explicitly self-identify as "abortion diary or abortion record", (b) describe termination due to fetal abnormalities and (c) document all four clinical phases (diagnostic, inpatient, puerperium, post-puerperium). Exclusion applied to: (a) Non-medical reasons: Terminations for unplanned pregnancy, divorce, or maternal health issues (b) Incomplete descriptions: Posts omitting ≥1 critical phase.

Data Coding and Analysis

We categorized the diaries into four phases before analysis, based on the clinical care continuum: diagnostic, inpatient abortion, puerperium, and post-puerperium. Users typically disclose details such as age when posting their diaries. Therefore, we first conducted a descriptive analysis of user characteristics (age, gestational age, diagnosis). Relevant information regarding the duration of each phase, locations, and involved personnel is depicted in the journey map to enhance understanding of the experiences. Missing information is labeled as "unknown." Subsequently, the text data were imported into NVivo 15, where thematic content analysis was conducted using a realist, inductive, and semantic approach. The first and second authors independently performed in-depth reviews and initial coding. Prior to formal analysis, both coders conducted multiple rounds of pilot coding on randomly selected posts, refining the codebook through iterative discussions to align interpretations of key themes. During the open coding phase, texts were segmented into sentences or paragraphs to identify similarities and categorize them. Axial coding followed, examining and synthesizing relationships between codes to construct more complex themes. Discrepancies in coding were resolved through iterative team discussions, wherein the first and second authors revisited raw data, refined code definitions, and applied consensus-based decision-making. For persistent disagreements, the third author reviewed the data to arbitrate, ensuring interpretive rigor. A detailed audit trail was maintained, documenting how conflicting codes were reconciled through contextual re-examination of the data. Cross-validation and peer debriefing further strengthened coding consistency. Cohen's kappa coefficients were calculated to assess inter-rater reliability for two coders. The Cohen's kappa coefficient was 0.83 (range 0.81–1.00) indicating perfect agreement.[29]

Ethical Considerations

This study was approved by the Ethics Committee of Gansu Health Vocational College (Approval No. 2024–457). Additionally, we adhered to the guidelines set forth by the Association of Internet Researchers,[30] collecting only publicly available data and ensuring the anonymity of the information.

Results

Basic Information Concerning the Diaries

A total of 291 diaries written by 38 women were collected. After excluding diaries with incomplete descriptions (specifically referred to posts missing documentation of ≥1 critical phase, as these phases were essential for understanding the holistic experience), 278 diaries from 35 women were analyzed (81 from the diagnostic phase, 73 from the in-patient abortion phase, 57 from the puerperium, and 67 from the post-puerperium phase). These diaries documented experiences from the initial diagnosis of fetal anomalies through the post-puerperium period, with the longest record extending to 462 days after the puerperium. Each participant contributed between 3 and 54 diary entries, with a total of 124,678 Chinese characters. Detailed demographic and medical information for the women is provided in Table 1.

Journey Mapping of Women Undergoing Termination Due to Fetal Abnormalities

Figure 1 illustrates the experiences of women undergoing induced abortions due to fetal abnormalities, detailing the duration, location, related personnel, primary tasks, and theme names for each phase. We also calculated the number of

Table 1 Specifc Demographic and Medical Information of the Women (n = 35)

No.	Age Range	Gestational Age (weeks)	Reason for Termination
1	25–29	29–40	Central nervous system disorders
2	35–39	21–28	Central nervous system disorders
3	Unknown	21–28	Gastrointestinal disorders
4	25–29	21–28	Genitourinary disorders
5	25–29	21–28	Cardiovascular disorders
6	Unknown	13–20	Chromosomal abnormalities
7	30–34	21–28	Cardiovascular disorders
8	Unknown	21–28	Cardiovascular disorders
9	35–39	29–40	Musculoskeletal disorders
10	25–29	21–28	Gastrointestinal disorders
11	Unknown	21–28	Chromosomal abnormalities
12	30–34	21–28	Gastrointestinal disorders
13	30–34	13–20	Chromosomal abnormalities
14	Unknown	29–40	Central nervous system disorders
15	Unknown	13–20	Gastrointestinal disorders
16	30–34	29–40	Cardiovascular disorders
17	30–34	21–28	Musculoskeletal disorders
18	30–34	13–20	Cardiovascular disorders
19	30–34	29–40	Chromosomal abnormalities
20	Unknown	21–28	Multi-malformation
21	Unknown	13–20	Central nervous system disorders
22	Unknown	13–20	Multi-malformation
23	Unknown	21–28	Chromosomal abnormalities
24	30–34	21–28	Chromosomal abnormalities
25	Unknown	13–20	Cardiovascular disorders
26	20–24	21–28	Cardiovascular disorders
27	Unknown	21–28	Genitourinary disorders
28	Unknown	29–40	Cardiovascular disorders
29	25–29	21–28	Multiple malformations
30	30–34	21–28	Cardiovascular disorders
31	Unknown	21–28	Cardiovascular disorders
32	35–39	13–20	Musculoskeletal disorders
33	35–39	21–28	Gastrointestinal disorders
34	Unknown	21–28	Cardiovascular disorders
35	30–34	13–20	Gastrointestinal disorders

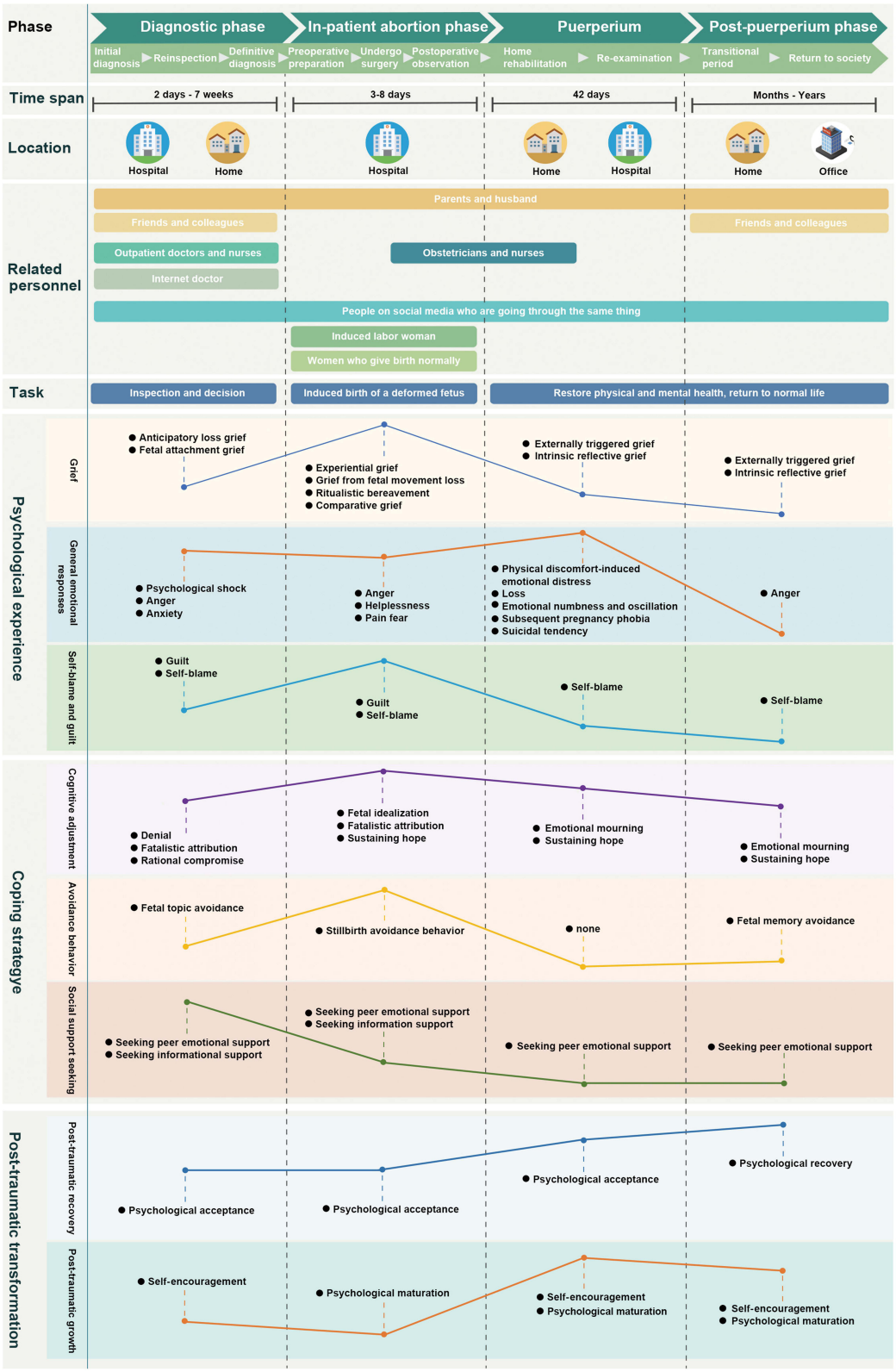

Figure 1 Journey mapping of women undergoing termination for fetal abnormalities.

https://doi.org/10.2147/IJWH.S509259

subthemes at each phase and created numerical trend graphs to visually represent the evolution of these themes. Three main themes emerged across all phases: psychological experience, coping strategies, and post-traumatic transformation; however, the names and quantities of subthemes and sub-subthemes under the same main theme varied by phase. Table 2 lists the identified theme names, their quantities, and representative examples for each phase.

Table 2 Theme Summary

Treatment Phase	Main Theme	Subtheme	Sub-Subtheme	Number	Example Diaries
Diagnostic phase	Psychological experience	Grief	Anticipatory loss grief	17	"I was consumed by grief and at a loss for how to break the news to my family, who were all eagerly awaiting the baby."31
			Fetal attachment grief	7	"Feeling the baby's movements only deepened my sorrow, and every kick brought tears to my eyes. I just can't bear the thought of parting with him."12
		General emotional responses	Psychological shock	9	"Suddenly, it felt as if the sky had darkened, and it was as though I had heard the worst news imaginable."2
			Anger	7	"I kept asking myself why others had healthy babies and why this had to happen to me."11
			Anxiety	9	"During the days of consulting and getting examined everywhere, I was fraught with anxiety."1
		Self-blame and guilt	Guilt	4	"I feel so guilty, towards my family, towards you. I'm just swamped with guilt."3
			Self-blame	2	"It was my mistake for not eating right and skipping the folic acid when I was pregnant with you."17
	Coping Strategy	Cognitive adjustment	Denial	6	"Right then, I was super calm, just figured they got it wrong."3
			Fatalistic attribution	3	"Maybe it's just not meant to be between this child and me."11
			Rational compromise	7	"It's tough to accept, but deep down, I know I need a healthy baby."4
		Avoidance behavior	Fetal topic avoidance	4	"I've been steering clear of my coworkers, scared they'll bring up anything about the baby."1
		Social support seeking	Seeking peer emotional support	2	"I've been searching online for people who understand my experience. Reading their stories made me feel less alone."24
			Seeking informational support	12	"On the way home, my husband and I searched online for information and called doctors we know for their opinions."11
	Post-Traumatic Transformation	Post-trauma recovery	Psychological acceptance	4	"I slowly found my peace and came to terms with what was happening."8
		Post-trauma growth	Self-encouragement	3	"I silently boosted my spirits, firmly believing that everything would get better."30
In-patient abortion phase	Psychological Experience	Grief	Experiential grief	20	"The doctor claimed there were no beds and sent me to another hospital, which just broke me down. It's not about seeking pity, it's a deep, internal grief."13
			Grief from fetal movement loss	14	"My little one was vibrant, interacting with me from the womb. But as the needle went in, I felt his struggle and distress. His last movements pierced me with pain; I knew he was leaving, and I couldn't stop crying."11
			Ritualistic bereavement	3	"While others' babies were cradled, mine was placed in a plastic bag. I am filled with sorrow that will stay with me forever."21
			Comparative grief	13	"The mother beside me happily nursed her baby, stirring a wave of sorrow within me, as my little one could only take medication (induction drugs)."23
		General emotional response	Anger	3	"I've never hurt anyone, why is this happening to me?"5
			Helplessness	3	"The observation room is like an icebox! I'm shivering non-stop and suddenly feeling totally helpless."21

(*Continued*)

Table 2 (Continued).

Treatment Phase	Main Theme	Subtheme	Sub-Subtheme	Number	Example Diaries
			Pain fear	17	"Today, I witnessed the entire process of the pregnant woman in the next bed, from her first contractions to the end of her induced labor. Seeing her in pain shook me and filled me with fear."8
		Self-blame and guilt	Guilt	4	"The guilt of feeling like I had to end my own child's life haunts me non-stop."23
			Self-blame	8	"I'm so sorry, little one, we didn't keep you safe."22
	Coping Strategy	Emotional regulation	Emotional suppression	3	"I'm holding back the tears, don't wanna make my hubby sad again."9
			Emotional farewell	3	"Rubbing my belly, I've been silently saying goodbye to our little one for a long time."1
		Cognitive adjustment	Fetal idealization	7	"My sweet little one, always so considerate, even made the abortion process less painful for mommy."13
			Fatalistic attribution	4	"It's because our baby was just too adorable, chosen to be a little angel in heaven, that's why she couldn't stay with us."6
			Sustaining hope	6	Before the abortion shot, I gently patted my belly and whispered, "Don't be scared, when we're both ready, I'll bring you home."29
		Avoidance behavior	Stillbirth avoidance behavior	15	"The doctor offered to show me the body, but I declined, fearing it would cause me more distress. Instead, I asked the doctor to show our child to my husband, allowing me to learn about our child's appearance indirectly."12
		Seeking social support	Seeking peer emotional support	3	"My hospital roommate, who has had her second abortion, helped lighten my heavy feelings. We supported each other as we faced this harsh reality together."10
			Seeking information support	2	"Lying in my hospital bed, I'm scrolling through my phone, checking out some information about abortion."24
	Post-Traumatic Transformation	Post-traumatic recovery	Psychological acceptance	4	"After a period of fear and tension, I gradually accepted it, feeling that this might be a release for the baby."32
		Post-traumatic growth	Psychological maturation	2	"Conversations with fellow patients helped me appreciate the significance and normalcy of childbirth. Despite its pain and uncertainties, it is a vital part of bringing forth the next generation. This shifted my mindset to a more serene state, fostering a sense of courage within me."17
Puerperium phase	Psychological Experience	Grief	Externally triggered grief	6	"Seeing news of a friend's newborn on social media brought back memories of my own child, and my heart ached again."21
			Intrinsic reflective grief	14	"Whenever I think of my baby, my heart is still filled with profound sadness."28
		General emotional response	Physical discomfort-induced emotional distress	19	"The discomfort from breast engorgement only adds to my gloom."4
			Loss	2	"I was so ready to welcome her, but it all ended in vain, leaving a void that's hard to fill."13
			Emotional numbness and oscillation	4	"I've lost interest in everything, feeling lifeless inside."11
			Subsequent pregnancy phobia	3	"The thought of getting pregnant again fills me with panic, fearing disappointment and pain."25
			Suicidal tendency	2	"I drowned in guilt and sorrow, feeling like I let down my husband, family, and baby, even contemplating giving up on life."28
		Self-blame and guilt	Self-blame	4	"Mom's heart is filled with self-blame for not being able to give you a healthy body."6
	Coping strategy	Cognitive adjustment	Emotional mourning	11	"I still think of you often. May you rest in peace in heaven."1

(*Continued*)

Table 2 (Continued).

Treatment Phase	Main Theme	Subtheme	Sub-Subtheme	Number	Example Diaries
			Sustaining hope	3	"I believe my little one will come back to me sooner or later."13
		Shifting attention	Behavioral distraction	8	"Today I forced myself to browse Taobao and bought some items to divert my attention."9
		Social support seeking	Seeking peer emotional support	2	"I constantly searched Zhihu for posts from people with similar experiences to alleviate my deep pain."33
	Post-traumatic transformation	Post-traumatic recovery	Psychological acceptance	6	"The best love for you is letting go and gradually stopping the tears."19
		Post-traumatic growth	Self-encouragement	2	"I'm still young; I'll definitely have healthy kids."33
			Psychological maturation	6	"Life is like a plant's growth: some seeds fail to sprout, some seedlings suffer from pests or disease. Not all will bloom or bear fruit. We, the living, should cherish every ray of sunlight and continue making our journey remarkable."26
Post-puerperium phase	Psychological experience	Grief	Externally triggered grief	2	"Seeing a month-old baby cradled tenderly filled me with immense envy, and I couldn't stop the tears."3
			Intrinsic reflective grief	9	"I once thought I could forget him, but I can't. The pain resurfaces unexpectedly, and the memories replay in my mind like a movie."34
		General emotional response	Anger	2	"I often can't understand why this 25% chance happened to fall on me."19
		Self-blame and guilt	Self-blame	2	"I'm sorry, I admit I was wrong, I shouldn't have given up on you."24
	Coping strategy	Cognitive adjustment	Emotional mourning	9	"Mom will still miss you often."11
			Sustaining hope	2	"Now, the only belief that sustains me is to take good care of my body, waiting for you to come back to my side."9
		Avoidance behavior	Fetal memory avoidance	1	"I blocked friends who are about to have babies on social media to avoid their updates, fearing they would trigger my memories."15
		Social support seeking	Seeking peer emotional support	2	"I buried my pain deep in my heart, but online, those who share my suffering truly understood. Sharing my story with them relieved my mood."32
	Post-traumatic transformation	Post-traumatic recovery	Psychological recovery	7	"I feel like I've already bounced back 95% by now."26
		Post-traumatic growth	Self-encouragement	5	"Fortunately, I was able to timely recognize and suppress these negative thoughts, encouraging myself to move past difficulties."11
			Psychological maturation	2	"The experiences of 2020 became a valuable treasure, fostering my growth and enhancing my ability to handle affairs."5

Diagnostic Phase

In this phase, women typically undergo repeated examinations over a period of 2 to 7 days to confirm fetal abnormalities, frequently traveling between hospitals and their homes. The primary tasks during this time are to confirm the diagnosis and decide whether to proceed with an induced abortion. The thematic distribution for this phase is as follows:

Main Theme 1: Psychological Experience

Grief

During this period, women's grief primarily manifested as "anticipatory loss grief" and "fetal attachment grief." The revelation of fetal abnormalities that may lead to pregnancy termination abruptly ended mothers' hopes for their child's future, resulting in mourning. Furthermore, despite the child not yet being born, a significant emotional bond exists between mothers and the fetus, and the severing of this bond elicits profound sorrow.

General Emotional Responses

This subtheme included a wide spectrum of emotions, such as "psychological shock", "anger", and "anxiety". Initially, the mothers often experienced profound psychological shock following the diagnosis, characterized by immediate and intense emotional turmoil. It was typically accompanied by anger and anxiety.

Self-Blame and Guilt

Self-blame and guilt encompassed two key sub-subthemes: "guilt" and "self-blame". When a fetus was diagnosed with an abnormality, the women often found themselves engulfed by intense feelings of guilt and self-reproach.

Main Theme 2: Coping Strategy

Cognitive Adjustment

This theme encompassed three aspects: "denial, fatalistic attribution, and rational compromise". Faced with a diagnosis of fetal abnormalities, the women often initially refused to accept it, suspecting a diagnostic error. However, when the diagnosis was repeatedly confirmed and the specific cause remained unidentified, they attributed it to fate and believed that their connection with the child was not meant to be. After struggling between reality and emotions, they typically made a rational decision to terminate their pregnancy.

Avoidance Behavior

The women's avoidance behavior manifested as "fetal topic avoidance", where they steered clear of conversations or cues related to their pregnancy.

Social Support Seeking

Women often engage with peers who share similar experiences online to seek information and emotional support. Additionally, they obtain medical information regarding fetal abnormalities from friends and healthcare providers to inform their decision-making.

Main Theme 3: Post-Traumatic Transformation

Post-Trauma Recovery

During diagnosis, the women gradually achieved psychological acceptance of the fetal abnormalities, signifying the onset of recovery from trauma.

Post-Trauma Growth

Faced with diagnoses of fetal abnormalities, some women cultivated greater maturity and resilience through continuous self-encouragement.

In-Patient Abortion Phase

During the hospitalization for induced abortion, women undergo a process lasting 3 to 8 days, which includes preoperative preparation, the procedure itself, and postoperative observation. Their interactions primarily occur in the hospital with family members, obstetricians, nurses, and other patients, with the main focus on the induction procedure.

Main Theme 1: Psychological Experience

Grief

During this stage, women confront various forms of grief, including experiential grief, grief due to fetal movement loss, ritualistic mourning, and comparative grief. They are particularly vulnerable in the hospital, where even minor issues can trigger profound sorrow. The cessation of fetal movement not only signifies the end of the fetus's life but also represents the shattering of future hopes, further exacerbating their pain. Additionally, the inhumane handling of stillborn fetuses, such as wrapping them in plastic bags, intensifies their anguish. The contrasting scenes of other mothers with their newborns starkly highlight their own plight, deepening their grief.

General Emotional Responses

During this stage, women commonly exhibit emotional reactions such as anger, helplessness, pain, and fear. Their anger, akin to their responses upon receiving a diagnosis, stems from a sense of injustice. Navigating unfamiliar medical environments, combined with the intense physical pain of induced labor, leaves them feeling isolated and vulnerable. Additionally, witnessing the suffering of other women in labor or learning about such experiences online further heightens their fear of pain.

Self-Blame and Guilt

Similar to the diagnostic phase, women's self-blame and guilt persisted during this period.

Main Theme 2: Coping Strategy

Emotional Regulation

The women used two emotion-regulation mechanisms: emotional suppression and emotional farewell. Emotional suppression involved avoiding the expression of emotions to prevent burdening their families or through fear of external judgments. Emotional farewell allowed the women to achieve emotional release and calmness by mentally expressing goodness to their unborn child, thereby alleviating their grief.

Cognitive Adjustment

The women employed three cognitive regulation mechanisms: fetal idealization, fatalistic attribution, and sustaining hope. In fetal idealization, they imagined the fetus as a flawless being with positive traits to alleviate their suffering. Fatalistic attribution involved perceiving the loss as destined, a higher power's decision beyond their control, which helped them accept reality. Sustaining hope meant imagining future reunions with children and creating a positive outlook.

Avoidance Behavior

During this period, women primarily exhibited avoidance behaviors by refraining from viewing stillborn infants. This avoidance stemmed from fear of confronting the stillborn, guilt over the abortion decision, and a desire to alleviate the pain of losing a child. Consequently, mothers often requested family members to view the child's body on their behalf as an indirect coping mechanism.

Social Support Seeking

These women sought emotional support by sharing their experiences with fellow patients facing similar situations and utilized online resources to gather information about abortion, thereby enhancing their understanding of their circumstances.

Main Theme 3: Post-Traumatic Transformation

Post-Trauma Recovery

The women experienced positive transformations following their trauma. This primarily manifested as "psychological acceptance", where they gradually moved from fear and tension to relief and acceptance.

Post-Trauma Growth

Regarding post-traumatic growth, women experienced "psychological maturity." Observing others' childbirth or abortion and their own experiences deepened their understanding of the significance of childbirth and the essence of life. This insight helped them face life challenges with a more peaceful mindset, and strengthened their courage to face difficulties.

Puerperium Phase

According to the guidelines, the recovery time for the puerperium period is 42 days.[31] They spent most of their time with their families, but occasionally visited the hospital for follow-up appointments with obstetricians and nurses. The main task of this stage was to regain health and gradually return to normal life.

Main Theme 1: Psychological Experience

Grief

The women's grief involved "externally triggered grief" and "intrinsic reflective grief." Externally triggered grief was sparked by events and caused intense sorrow. Intrinsic reflective grief stemmed from the deep contemplation and memories of loss originating from within themselves.

General Emotional Responses

The women's emotional responses were exceptionally complex. "Physical discomfort-induced emotional distress" was common, with postpartum discomfort worsening emotional difficulties, making vulnerable women feel more despondent. The unexpected loss of a child resulted in profound emptiness and heartache. The women also experienced emotional numbness and fluctuations, showing little interest in their surroundings, and alternating between calm and negative states. The fear of becoming pregnant again, filled with the dread of further disappointment and pain, was another issue. In extreme cases, a continuous struggle with emotions and psychological pain led to suicidal thoughts.

Self-Blame and Guilt

The sense of shame experienced by the women primarily involved self-blame. They felt disheartened by their perceived inadequacies as mothers and felt deep guilt for not providing their children with a healthy body.

Main Theme 2: Coping Strategy

Cognitive Adjustment

Following childbirth, the women's cognitive adjustments primarily manifested as "emotional mourning" and "sustaining hope." They recalled and missed their unborn babies, wishing them peace in heaven. They also believed that their deceased children would return, renewing the mother-child bond.

Shifting Attention

After childbirth, the women diverted their attention through shopping and reading.

Social Support Seeking

The women primarily sought online emotional support. They read posts from people with similar experiences and engaged in conversations to understand and alleviate their distress.

Main Theme 3: Post-Traumatic Transformation

Post-Trauma Recovery

The women began to accept reality, gradually moving beyond their past pain and toward recovery.

Post-Trauma Growth

Self-motivation and psychological maturation were key to the women's growth after this trauma. They strived to break free from negative emotions and thoughts, thereby motivating themselves to move forward. Additionally, after abortion, they gained a deeper understanding of life, death, and the laws of nature.

Post-Puerperium Phase

After the postpartum period, these women gradually resumed their daily lives and work, primarily engaging with family, friends, and colleagues.

Main Theme 1: Psychological Experience

Grief

Similar to the postpartum period, the women's grief involved externally triggered and intrinsically reflective grief. External influences or others' actions reawakened memories and emotions of their loss, immersing them in sorrow. Internally, they continuously revisited and reflected on their losses, which intensified their grief.

General Emotional Responses

The women often felt unfairly treated, which led to anger. In addition, some regretted their decision to undergo an abortion.

Self-Blame and Guilt

The women still harbored feelings of self-blame.

Main Theme 2: Coping Strategy

Cognitive Adjustment

The women adjusted cognitively through emotional mourning, sustaining hope, and anticipation of subsequent conception. They frequently reminisced about their children and sent heartfelt blessings to them. Holding onto the hope that "the child will return to them", this belief supported their continued life. Over time, this hope transformed into the anticipation of becoming pregnant again, helping them emerge from their sorrow.

Avoidance Behavior

The women engaged in defensive avoidance behaviors to reduce emotional distress. They blocked certain social media content to avoid triggers that reminded them of their abortion experiences.

Social Support Seeking

The women sought others with similar experiences online and gained emotional support by sharing their stories and listening to others.

Main Theme 3: Post-Traumatic Transformation

Post-Trauma Recovery

The women's recovery after trauma mainly manifested as "psychological recuperation." They gradually moved from their initial grief and accepted what had happened, and their emotions began to stabilize.

Post-Trauma Growth

The women's post-trauma growth manifested as "psychological maturation" and "self-motivation". Induced labor led to a deeper understanding of life, enhancing resilience and problem-solving skills. They also gained profound self-understanding, tapping into their inner strengths to actively improve themselves.

Discussion

This research visualizes the healthcare trajectories of Chinese women undergoing termination due to fetal abnormalities through journey mapping spanning prenatal diagnosis to postpartum recovery. The analysis revealed four distinct phases in pregnancy termination experiences due to fetal abnormalities, with three core themes persisting through each stage: psychological experiences, coping strategies, and post-traumatic transformation, along with ten subthemes: grief, general emotional responses, self-blame and guilt, cognitive adjustment, social support seeking, post-trauma recovery, post-trauma growth, avoidance behaviors, emotional regulation, and shifting attention. Ten subthemes emerged through rigorous qualitative analysis, demonstrating phase-specific variations: avoidance behaviors permeated all phases except the postpartum, while emotion regulation strategies, including suppression and parting, primarily occurred during the inpatient abortion phase, where women often concealed their sadness from family to mitigate distress but experienced breakdowns when alone. This contrasts with Carlsson's findings,[32] which suggest women express emotions to family, highlighting cultural differences in emotional expression. Shifting attention was noted only during the postpartum phase, manifested through distractions like online shopping, differing from Lafarge's study where women diverted attention by going out or returning to work.[33] This difference may relate to the Chinese tradition of confinement after childbirth. The remaining seven secondary themes were present across all four phases.

Women experienced the highest levels of grief during hospitalization for termination, which subsequently dropped to the lowest levels in the postpartum phase. In the diagnostic phase, the presence of fetal movement intensified grief,

consistent with findings by Andersson[34] and DiMiceli-Zsigmond.[35] This study indicates that the loss of fetal movement during hospitalization triggers profound sadness, a sentiment echoed in Aydin's research,[36] which highlights feelings of loneliness and pain following the cessation of movement. DiMiceli-Zsigmond's study noted a woman who felt traumatized by receiving congratulations while holding her deceased daughter;[35] similarly, our findings revealed that women experienced acute distress upon hearing a newborn cry. The inhumane practice of placing stillborn fetuses in plastic bags exacerbates maternal trauma. In the postpartum phase, grief is often influenced by both internal and external factors, leading to persistent negative thinking, as also observed in Patrício's study.[37]

Notably, the women's general emotional responses gradually increased, peaked during the postpartum phase, and then rapidly declined. During the diagnostic phase, women predominantly experience intense psychological shock and anger, reflecting the significant psychological trauma resulting from the loss of expectations for a healthy baby, consistent with the findings of Wilpers.[38] During hospitalization for labor induction, women commonly express fear of the induction process; Lafarge[33] and Andersson[34] noted that interactions with other patients and online information exacerbate this fear. In the postpartum phase, women frequently exhibit complex emotional responses due to physical discomfort, such as breast engorgement, bleeding, and weakness, leading to feelings of helplessness and emotional numbness, questioning their fertility, and even contemplating suicide. Research indicates that women who undergo abortion due to fetal abnormalities are four times more likely to experience postpartum depression compared to those with normal pregnancies,[15] highlighting the need for targeted psychological support and suicide prevention during this vulnerable period. Furthermore, this study found that some women continue to experience anger in the postpartum phase, a sentiment also observed in Gopichandran's research.[39]

Women's self-blame and guilt primarily manifests as guilt and self-blame. Within the Chinese cultural context, fetal abnormalities are not only perceived as personal tragedies but also often evoke negative public reactions, leading to feelings of shame that exacerbate guilt.[40] During hospitalization for pregnancy termination, women frequently feel as though they have "killed" their child, resulting in heightened levels of guilt and self-blame. These emotions tend to decline in the postpartum phase, likely as women gradually come to terms with their experiences. Additionally, women often attribute fetal abnormalities to their own dietary or behavioral choices, reinforcing feelings of self-blame, which aligns with findings from Maguire's study.[41]

Women's cognitive coping strategies remain relatively stable across all phases, indicating their key role in addressing the challenges posed by fetal abnormalities. During the diagnostic phase, women primarily employ denial, fate attribution, and rational decision-making to cope with traumatic events.[14,42] Many women attribute fetal abnormalities to the predetermined short lifespan of the fetus, which aligns with Lafarge's findings.[43] After repeated medical examinations, despite feelings of helplessness, the majority of women ultimately choose to terminate the pregnancy after careful consideration. During hospitalization, their cognitive coping strategies include fatalistic attributions, fetal idealization, and hopes for continuity. Women derive psychological comfort by attributing compassionate traits to the fetus and harbor hopes of reuniting with their child in the future, thereby alleviating the pain of loss.[14] This strategy continues into the postpartum phase, where women still hope that the "lost child" may return in a healthy form.[39,41] In China, women often find it difficult to publicly mourn the "lost child"; however, social media provides them with a private platform to share their emotions and express their longing, helping to alleviate the pain of losing their child.[44]

During hospitalization for pregnancy termination, women's avoidance behaviors peaked, primarily manifesting as the avoidance of stillborn infants. Studies by DiMiceli-Zsigmond[35] and Lotto[45] indicate that some women choose not to see or hold the deceased infant to mitigate emotional distress and grief, which aligns with our findings. However, other research suggests that direct contact with the infant's body can aid in processing grief and provide comfort regarding the decision to terminate the pregnancy.[35,45] In the diagnostic and postpartum phases, women typically avoid topics related to infants; although this avoidance may temporarily lessen emotional burdens, it could prolong the grieving process.[14,43] Furthermore, our study found that avoidance behaviors during the postpartum period were not significant, possibly due to the cultural practice of "zuo yuezi" in China. During this period, women often experience social isolation, with sensitive topics being avoided by family members and visitors. Ayebare's research similarly highlights this phenomenon in postpartum practices in Uganda and Kenya.[46]

In these women's abortion diaries, seeking social support emerged as a recurring theme. During the diagnostic and hospitalization phases, women frequently sought informational support, reflecting their urgent need for information in the face of the uncertainties and challenges posed by fetal abnormalities. They actively explored various channels to understand the nature of fetal abnormalities and potential solutions.[47] Notably, this study found that women tend to seek peers with similar experiences through social media, indicating that peers serve as their primary emotional supporters and that they have a strong desire to communicate with others. Qian J's research also highlights the importance of peers in providing emotional support.[10] Additionally, Maguire's study reveals that 72% of women who have experienced abortion expressed a desire to communicate with others.[41]

Regarding post-trauma recovery, during the first three treatment phases, women primarily exhibited psychological acceptance. During this period, they may experience emotional fluctuations but gradually begin to accept reality. Psychological acceptance is considered a critical step in reducing long-term psychological trauma, as it helps alleviate acute stress responses and prevents the development of chronic psychological issues.[48] After the postpartum phase, women recover from the negative impacts of abortion and regain their capacity for enjoyment and a sense of purpose. Additionally, this study found that post-traumatic growth in women primarily manifested as self-motivation and psychological maturity. During the diagnostic and postpartum phases, they tackled difficulties by stimulating their inner drive and maintaining a positive mindset, fostering personal growth. Throughout hospitalization for abortion and into the postpartum phase, women demonstrated improved emotional understanding and management abilities, adopting a more mature and rational approach to life, which aligns with the findings of Qian et al.[10]

The study has several limitations. Data collection for this study was limited to three social media platforms: Douban, Zhihu, and Jianshu, which may have restricted the diversity and representativeness of the sample. Additionally, the data were primarily derived from online diaries, indicating that participants may possess strong writing and expressive abilities. As a result, the perspectives of individuals who are less skilled in written expression, less inclined to use social media, or unwilling to share personal experiences publicly may not be adequately represented. Furthermore, while this study focused on exploring the shared psychological trajectories among women undergoing termination for fetal abnormalities, the methodological approach did not differentiate between pharmacological and surgical termination methods. The potential variations in decision-making processes, emotional responses, and recovery patterns associated with different termination procedures remain unexplored. Subsequent research could employ comparative design to investigate how termination method selection interacts with psychological adaptation mechanisms, particularly in cultural contexts where medical procedure choices may carry distinct symbolic meanings.

Conclusions

This study visually presented the trajectory of experiences of women undergoing pregnancy termination due to fetal abnormalities using journey maps. Grief, emotional responses, moral introspection, cognitive adjustment, avoidance behaviors, seeking social support, post-trauma recovery, and post-traumatic growth were common throughout the abortion process, although their intensity varied at different phases. Emotion regulation strategies were primarily employed during the in-patient abortion phase, whereas shifting attention strategies were predominantly used during the postpartum phase. This study contributes a novel visual representation of the abortion journey, enriching the understanding of women's experiences, and aids in designing more targeted and effective interventions. While thematic analysis of diaries provided rich narratives about the experiences of women undergoing termination due to fetal abnormalities, our sampling approach inherently captures digitally active populations who voluntarily disclose health information online, so it may not be representative of the Chinese population. Furthermore, the retrospective narrative structure of diary entries precludes definitive causal attribution between clinical events and psychological outcomes.

Data Sharing Statement

The datasets used and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Ethics Approval and Informed Consent

This study was approved by the Ethics Committee of Gansu Health Vocational College (Approval No. 2024-457). We adhered to Guideline established by the Association of Internet Researchers (AoIR) Ethics Working Committee. We collected only publicly available information and excluded images with personal details. During data coding and analysis, the data were anonymized and identification numbers were assigned to maintain confidentiality. We also carefully excluded any potentially identifiable information such as usernames, names, addresses, or contact details.

Consent for Publication

Consent for publication is not applicable, as this study did not include any images, videos, recordings, or other materials requiring individual consent.

Acknowledgment

We would like to express my gratitude to Chen Meixiu for providing technical support in image enhancement. The psychological content of this study underwent professional verification by Ms. Ji Zhenying, a Ministry of Human Resources and Social Security-certified Psychological Counselor. We extend special gratitude for her expertise.

Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

Funding

This study was supported by "Wenzhou Basic Public Welfare Scientific Research Project Y20220406" and "Gansu Provincial University Innovation Project 2024A-320".

Disclosure

The authors declare no competing interests in this work.

References

1. Zhang X, Chen L, Wang X, et al. Changes in maternal age and prevalence of congenital anomalies during the enactment of China's universal two-child policy (2013–2017) in Zhejiang Province, China: an observational study. *PLoS Med*. 2020;17(2):e1003047. doi:10.1371/journal.pmed.1003047
2. Ghazi T, Naidoo P, Naidoo RN, Chuturgoon AA. Prenatal Air Pollution Exposure and Placental DNA Methylation Changes: implications on Fetal Development and Future Disease Susceptibility. *Cells*. 2021;10(11):3025. doi:10.3390/cells10113025
3. Tan AG, Sethi N, Sulaiman S. Evaluation of prenatal central nervous system anomalies: obstetric management, fetal outcomes and chromosome abnormalities. *BMC Pregnancy Childbirth*. 2022;22(1):210. doi:10.1186/s12884-022-04555-9
4. Chen X, Lou H, Chen L, Muhuza MPU, Chen D, Zhang X. Epidemiology of birth defects in teenage pregnancies: based on provincial surveillance system in eastern China. *Front Public Health*. 2022;10:1008028. doi:10.3389/fpubh.2022.1008028
5. Blencowe H, Cousens S, Jassir FB, et al. National, regional, and worldwide estimates of stillbirth rates in 2015, with trends from 2000: a systematic analysis. *Lancet Glob Health*. 2016;4(2):e98–e108. doi:10.1016/S2214-109X(15)00275-2
6. Heaney S, Tomlinson M, Aventin Á. Termination of pregnancy for fetal anomaly: a systematic review of the healthcare experiences and needs of parents. *BMC Pregnancy Childbirth*. 2022;22(1):441. doi:10.1186/s12884-022-04770-4
7. Xie D, Liang C, Xiang Y, et al. Prenatal diagnosis of birth defects and termination of pregnancy in Hunan Province, China. *Prenat Diagn*. 2020;40(8):925–930. doi:10.1002/pd.5648
8. Qian J, Yu X, Sun S, Zhou X, Wu M, Yang M. Expressive writing for Chinese women with foetal abnormalities undergoing pregnancy termination: an interview study of women's perceptions. *Midwifery*. 2019;79:102548. doi:10.1016/j.midw.2019.102548
9. Zhang Q, Qin C, Xie J, et al. Effect and pathway of abortion stigma on depressive symptoms before terminating the pregnancy in pregnant women with fetal anomaly. *Zhong Nan Da Xue Xue Bao Yi Xue Ban*. 2023;48(3):435–443. doi:10.11817/j.issn.1672-7347.2023.220327
10. Qian J, Sun S, Yang M, Zhou X, Wu M, Yu X. Psychological trajectories of Chinese women undergoing pregnancy termination for foetal abnormality: a descriptive qualitative study using expressive writing. *J Clin Nurs*. 2020;29(19–20):3667–3678. doi:10.1111/jocn.15386
11. Yue J, Liu J, Williams S, et al. Barriers and facilitators of kangaroo mother care adoption in five Chinese hospitals: a qualitative study. *BMC Public Health*. 2020;20(1):1234. doi:10.1186/s12889-020-09337-6

12. Chang SHC, Hall WA, Campbell S, Lee L. Experiences of Chinese immigrant women following "zuo yue zi" in British Columbia. *J Clin Nurs*. 2018;27(7–8):e1385–e1394. doi:10.1111/jocn.14236
13. Zhang T, Chen WT, He Q, et al. Coping strategies following the diagnosis of a fetal anomaly: a scoping review. *Front Public Health*. 2023;11:1055562. doi:10.3389/fpubh.2023.1055562
14. Qin C, Chen WT, Deng Y, et al. Cognition, emotion, and behaviour in women undergoing pregnancy termination for foetal anomaly: a grounded theory analysis. *Midwifery*. 2019;68:84–90. doi:10.1016/j.midw.2018.10.006
15. Gold KJ, Leon I, Boggs ME, Sen A. Depression and posttraumatic stress symptoms after perinatal loss in a population-based sample. *J Women's Health*. 2016;25(3):263. doi:10.1089/jwh.2015.5284
16. Irmscher L, Marx R, Linke M, Zimmermann A, Drössler S, Berth H. Anxiety, depression, somatization and psychological distress before and 2–6 years after a late termination of pregnancy due to fetal anomalies. *BMC Women's Health*. 2024;24(1):255. doi:10.1186/s12905-024-03082-3
17. Waring ME, Blackman Carr LT, Heersping GE. Social media use among parents and women of childbearing age in the US. *Prev Chronic Dis*. 2023;20:E07. doi:10.5888/pcd20.220194
18. Perrenoud P, Kaech C, Chautems C. Immigrant women looking for information about the perinatal period on digital media: a qualitative study. *Women Birth*. 2023;36(3):e341–e352. doi:10.1016/j.wombi.2022.10.003
19. Peng S. *The study of media as human memory—from the perspective of media memory theory*. Zhejiang University; 2014. Available from: https://kns.cnki.net/KCMS/detail/detail.aspx?dbcode=CDFD&dbname=CDFD1214&filename=1014355322.nh. Accessed October 31, 2024.
20. Feng R, Ivanov A. Gender differences in emotional valence and social media content engagement behaviors in pandemic diaries: an analysis based on microblog texts. *Behav Sci*. 2022;13(1):34. doi:10.3390/bs13010034
21. Sormunen T, Westerbotn M, Aanesen A, Fossum B, Karlgren K. Social media in the infertile community-using a text analysis tool to identify the topics of discussion on the multitude of infertility blogs. *Women's Health*. 2021;17:17455065211063280. doi:10.1177/17455065211063280
22. Jones HM, Orr J, Whelan ME, Oyebode O. An exploration of pregnancy and postpartum content on Instagram: a content analysis of health and exercise focused accounts. *Women Birth*. 2024;37(4):101632. doi:10.1016/j.wombi.2024.101632
23. Crosier A, Handford A. Customer journey mapping as an advocacy tool for disabled people: a case study. *Social Marketing Q*. 2012;18(1):67–76. doi:10.1177/1524500411435483
24. Ly S, Runacres F, Poon P. Journey mapping as a novel approach to healthcare: a qualitative mixed methods study in palliative care. *BMC Health Serv Res*. 2021;21(1):915. doi:10.1186/s12913-021-06934-y
25. Fennelly O, Blake C, FitzGerald O, et al. Advanced musculoskeletal physiotherapy practice: the patient journey and experience. *Musculoskelet Sci Pract*. 2020;45:102077. doi:10.1016/j.msksp.2019.102077
26. Ciria-Suarez L, Jiménez-Fonseca P, Palacín-Lois M, et al. Breast cancer patient experiences through a journey map: a qualitative study. *PLoS One*. 2021;16(9):e0257680. doi:10.1371/journal.pone.0257680
27. Cudjoe E. Using diaries with interpretative phenomenological analysis: guidelines from a study of children whose parents have mental illness. *Int J Qual Methods*. 2022;21:16094069221084435. doi:10.1177/16094069221084435
28. Zhou Q, Xu Y, Yang L, Menhas R. Attitudes of the public and medical professionals toward nurse prescribing: a text-mining study based on social medias. *Int J Nurs Sci*. 2023;11(1):99–105. doi:10.1016/j.ijnss.2023.12.005
29. McHugh ML. Interrater reliability: the kappa statistic. *Biochem Med*. 2012;22(3):276–282. doi:10.11613/BM.2012.031
30. Markham AN, Buchanan E. Ethical decision-making and internet research: version 2.0 recommendations from the AoIR ethics working committee. 2012. Available from: https://www.semanticscholar.org/paper/Ethical-Decision-Making-and-Internet-Research%3A-2.0-Markham-Buchanan/d3a4023b98c036f357a3a4b4a274fdd952e79081. Accessed May 9, 2024.
31. Circular of the Ministry of Health on Printing and issuing Management Approach for Maternal HealthCare and Standards for Maternal Health Care. Available from: http://www.nhc.gov.cn/fys/s3581/201107/8d09ba60c19545e3b80fa65328183537.shtml. Accessed April 2, 2025.
32. Carlsson T, Starke V, Mattsson E. The emotional process from diagnosis to birth following a prenatal diagnosis of fetal anomaly: a qualitative study of messages in online discussion boards. *Midwifery*. 2017;48:53–59. doi:10.1016/j.midw.2017.02.010
33. Lafarge C, Mitchell K, Fox P. Women's experiences of coping with pregnancy termination for fetal abnormality. *Qual Health Res*. 2013;23(7):924–936. doi:10.1177/1049732313484198
34. Andersson IM, Christensson K, Gemzell-Danielsson K. Experiences, feelings and thoughts of women undergoing second trimester medical termination of pregnancy. *PLoS One*. 2014;9(12):e115957. doi:10.1371/journal.pone.0115957
35. DiMiceli-Zsigmond M, Williams AK, Richardson MG. Expecting the unexpected: perspectives on stillbirth and late termination of pregnancy for fetal anomalies. *Anesthesia Analg*. 2015;121(2):457–464. doi:10.1213/ANE.0000000000000785
36. Aydin R, Körükcü Ö, Kabukcuoğlu K. Investigation of the experiences of mothers living through prenatal loss incidents: a qualitative study. *J Nurs Res*. 2019;27(3):e22. doi:10.1097/jnr.0000000000000289
37. de S PS, Gregório VRP, Pereira SM, Costa R. Fetal abnormality with possibility of legal termination: maternal dilemmas. *Rev Bras Enferm*. 2019;72(suppl 3):125–131. doi:10.1590/0034-7167-2018-0234
38. Wilpers AB, Kennedy HP, Wall D, Funk M, Bahtiyar MO. Maternal anxiety related to prenatal diagnoses of fetal anomalies that require surgery. *J Obstet Gynecol Neonatal Nurs*. 2017;46(3):456–464. doi:10.1016/j.jogn.2017.02.001
39. Gopichandran V, Subramaniam S, Kalsingh MJ. Psycho-social impact of stillbirths on women and their families in Tamil Nadu, India - a qualitative study. *BMC Pregnancy Childbirth*. 2018;18(1):109. doi:10.1186/s12884-018-1742-0
40. Li G, Chandrasekharan S, Allyse M. "The Top Priority Is a Healthy Baby": narratives of Health, Disability, and Abortion in Online Pregnancy Forum Discussions in the US and China. *J Genet Couns*. 2017;26(1):32–39. doi:10.1007/s10897-016-9976-3
41. Maguire M, Light A, Kuppermann M, Dalton VK, Steinauer JE, Kerns JL. Grief after second-trimester termination for fetal anomaly: a qualitative study. *Contraception*. 2015;91(3):234–239. doi:10.1016/j.contraception.2014.11.015
42. Kamranpour B, Noroozi M, Bahrami M. Psychological experiences of women with pregnancy termination due to fetal anomalies: a qualitative study from the perspective of women, their spouses, and healthcare providers in Iran. *Reprod Health*. 2020;17(1):109. doi:10.1186/s12978-020-00959-y
43. Lafarge C, Mitchell K, Breeze ACG, Fox P. Pregnancy termination for fetal abnormality: are health professionals' perceptions of women's coping congruent with women's accounts? *BMC Pregnancy Childbirth*. 2017;17(1):60. doi:10.1186/s12884-017-1238-3

44. Tseng YF, Cheng HR, Chen YP, Yang SF, Cheng PT. Grief reactions of couples to perinatal loss: a one-year prospective follow-up. *J Clin Nurs*. 2017;26(23–24):5133–5142. doi:10.1111/jocn.14059
45. Lotto R, Armstrong N, Smith LK. Care provision during termination of pregnancy following diagnosis of a severe congenital anomaly - A qualitative study of what is important to parents. *Midwifery*. 2016;43:14–20. doi:10.1016/j.midw.2016.10.003
46. Ayebare E, Lavender T, Mweteise J, et al. The impact of cultural beliefs and practices on parents' experiences of bereavement following stillbirth: a qualitative study in Uganda and Kenya. *BMC Pregnancy Childbirth*. 2021;21(1):443. doi:10.1186/s12884-021-03912-4
47. Atienza-Carrasco J, Linares-Abad M, Padilla-Ruiz M, Morales-Gil IM. Experiences and outcomes following diagnosis of congenital foetal anomaly and medical termination of pregnancy: a phenomenological study. *J Clin Nurs*. 2020;29(7–8):1220–1237. doi:10.1111/jocn.15162
48. Thompson RW, Arnkoff DB, Glass CR. Conceptualizing mindfulness and acceptance as components of psychological resilience to trauma. *Trauma Violence Abuse*. 2011;12(4):220–235. doi:10.1177/1524838011416375