

Women's experiences and decision making about physical activity during pregnancy in Kaski district

Sharmila Poudel^{1*}, Rajmi Gurung¹, Shreejana Shrestha², Deepti KC³

¹Department of Women's Health and Development, Gandaki Medical College Teaching Hospital and Research Center, Pokhara, Nepal, ²Department of Adult Health Nursing, College of Nursing Sciences, Gandaki Medical College Teaching Hospital and Research Center, Pokhara, Nepal, ³Glasgow Caledonian University, Scotland, UK

ABSTRACT

Introduction: Physical activity during pregnancy affects multiple aspects of a woman's life. Attitudes, values, experiences, and socio-cultural contexts play an important role in participation in physical activity. This study aimed to explore pregnant women lived experiences and perceptions of physical activity. **Methods:** A qualitative phenomenological study was conducted among women attending obstetrics outpatient department of Gandaki Medical College Teaching Hospital and Research Centre. Purposive sampling was used to recruit participants meeting inclusion criteria. The researchers performed semi-structured interviews, audio recorded them, transcribed the verbatim, and used thematic analysis. This approach focused on capturing the essence of participants lived experiences while organizing data into meaningful patterns. **Results:** Three major experiential themes emerged. 1) Perceptions of Pregnancy and Physical Activity: Women recognized the benefits of exercise but had limited knowledge of safe types, intensity, and frequency, often equating physical activity with household chores. 2) Experiences and Influences on Physical Activity: Participation was influenced by perceived benefits, fear of harming the foetus, fatigue, and social or cultural restrictions. Support from spouses, family, peers, and community resources facilitated engagement. 3) Experiences with Healthcare Providers and Recommendations: Guidance from healthcare professionals was often inadequate, leaving women uncertain about safe practices. Participants suggested structured counselling, practical demonstrations, family support, and accessible community programs to promote safe physical activity during pregnancy. **Conclusions:** Pregnant women recognize the benefits of physical activity but possess limited understanding of appropriate exercises, frequency, and safety. Interventions promoting physical activity should address informational gaps and take sociocultural circumstances into account.

Keywords: Experiences, phenomenology, physical activity, pregnancy, thematic analysis.

*Correspondence:

Ms. Sharmila Poudel
Department of Women's Health and Development
Gandaki Medical College Teaching Hospital and Research Center, Pokhara, Nepal
Email: sharmilapoudel1234@gmail.com

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INTRODUCTION

Regular, moderate-intensity exercise is widely recognized as an essential component of a healthy pregnancy. Evidence-based guidelines recommend that healthy women with uncomplicated pregnancies engage in at least 150 minutes of moderate-intensity aerobic activity per week, or 20 to 30 minutes per day on most days, to maintain physical fitness, manage weight, reduce the risk of gestational diabetes, and support psychological well-being.^{1,2} In addition to physical benefits, maintaining or increasing exercise levels from pre-pregnancy through the postpartum period has been associated with improved maternal mood and overall life satisfaction.^{3,4}

Despite these benefits, pregnancy is often perceived as a period requiring relaxation of prior health routines. Many women reduce their physical activity due to physiological changes, including increased heart rate, cardiac output, breathing effort, and joint laxity, which raise the risk of fatigue, injury, and discomfort.⁵⁻⁷

Moreover, social and psychological factors, including family expectations, cultural norms, and conflicting advice from healthcare providers or peers, can further discourage exercise during this time.^{8,9} Intrapersonal barriers such as pain, swelling, medical restrictions, and lack of knowledge about safe exercises also contribute to low participation.¹⁰⁻¹²

Research indicates that maternal physical activity tends to decline, particularly in the second and third trimesters, and often remains low into the postpartum period.^{6,7} While these patterns have been documented internationally, there is limited evidence exploring pregnant women lived experiences and perceptions of physical activity in the Nepalese context. Understanding these experiences is crucial to designing culturally sensitive interventions that promote safe and regular exercise during pregnancy. Therefore, this study aimed to explore pregnant women lived experiences and perceptions of physical activity.

METHODS

Study design: A qualitative study using a phenomenological approach was conducted to explore the lived experiences of pregnant women regarding physical activity. This approach was chosen to gain in-depth understanding of participants' perceptions, beliefs, and experiences.

Study setting and duration: The study was conducted over six months, from September 2022 to February 2023, at the outpatient department of Obstetrics of Gandaki medical college teaching hospital and research center in Pokhara.

Study population: The study population included pregnant women aged 18 years and above, attending the antenatal clinic during their routine visits. Only women with uncomplicated pregnancies who were physically able to participate in interviews were considered.

Inclusion and exclusion criteria: Pregnant women aged ≥ 18 years attending routine antenatal care at the hospital, irrespective of parity or gestational age who were willing and able to provide informed consent and participate in interviews lasting up to 60 minutes were included whereas, women with medical complications that could prevent participation in a detailed interview (e.g., severe preeclampsia, serious cardiovascular or musculoskeletal conditions) and not able to communicate in the local language or provide coherent responses due to cognitive impairment were excluded.

Sampling and recruitment: Participants were selected using purposive sampling to ensure in-depth understanding of experiences related to physical activity during pregnancy.

Selection criteria emphasized variation in age, parity, and gestational stage to capture a range of perspectives. Eligible women were approached during their antenatal visits, provided with information about the study, and invited to participate. Recruitment continued until data saturation was achieved, defined as the point when no new themes emerged from additional interviews.

Data Collection tools and techniques: A semi-structured interview guide, developed from a literature review and translated into Nepali, provided a framework for data collection. The guide was pilot tested with one participant (excluded from analysis), and minor refinements were made. Deep, semi-structured interviews were conducted by the first author at the antenatal outpatient department of a hospital in Pokhara, starting with broad, open-ended questions such as: "What experiences regarding physical activity do you have during pregnancy?" "What types of effects do you think physical activity can have during pregnancy?" Participants were encouraged to share their experiences in detail, with probing questions used as needed. Interviews were audio-recorded with consent, transcribed verbatim, and reviewed for accuracy. Duration varied according to participant comfort, and participants could pause or terminate the interview at any time.

Ethical consideration: Ethical approval for this study was obtained from the Institutional Review Committee [Ref no 160/079/080] of the hospital in Pokhara. Written informed consent was obtained from all participants prior to data collection, and confidentiality was strictly maintained throughout the study.

Data analysis: Interviews were transcribed verbatim in Nepali and translated into English by two independent translators, with back-translation performed to ensure conceptual equivalence and preserve meaning. Transcripts were repeatedly read by the first author, who conducted the initial coding and thematic analysis to gain familiarity with the data. Data were analysed using thematic analysis, focusing on participants' lived experiences. Meaningful statements related to physical activity during pregnancy were identified and coded. Codes were then grouped into categories based on similarities and differences and refined through iterative discussions among all researchers. These categories were further consolidated into overarching themes that reflected the essence of participants' experiences, capturing the core patterns and perspectives across the dataset.

RESULTS

A total of 10 pregnant women participated in the study. Participants' ages ranged from 21 years to 34 years, with a median age of 28.5 years. Both primiparous and multiparous women were included, and gestational ages varied from 18 to 34 weeks. Most participants had completed secondary or higher education, and the majority were homemakers, with a few engaged in professional or student roles. Participants represented diverse socio-economic and family backgrounds, reflecting the broader population attending the antenatal outpatient department.

Thematic analysis revealed three overarching themes capturing participants' perceptions and experiences of physical activity during pregnancy: (1) Perceptions of Pregnancy and Physical Activity, (2) Experiences and Influences on Physical Activity, (3) Interaction with Healthcare Providers and Recommendations. Each theme is supported by subthemes and illustrative quotes, followed by brief interpretation (Table 1).

Table 1: Themes and sub-themes

Theme	Sub-theme
Theme 1: Perceptions of Pregnancy and Physical Activity	1.1 Awareness of Physical Activity
	1.2 Experiences of Current Pregnancy
	1.3 Lifestyle Patterns
	1.4 Sources of Information
Theme 2: Experiences and Influences on Physical Activity	2.1 Perceived Pros and Cons of Physical Activity
	2.2 Barriers to Physical Activity
	2.3 Facilitators of Activity
Theme 3: Interaction with Healthcare Providers and Recommendations	3.1 Inadequate Guidance from Healthcare Providers
	3.2 Recommendations for Improved Participation

Theme 1: Perceptions of pregnancy and physical activity

This theme captures participants' understanding of physical activity, their experiences and emotions during pregnancy, lifestyle patterns, and sources of information, highlighting how awareness, beliefs, and personal circumstances influence engagement in physical activity.

Sub-theme 1.1: Awareness of physical activity

Participants demonstrated varying levels of awareness regarding physical activity during pregnancy. While most recognized its importance for maternal and foetal health, their understanding of appropriate types of exercise, intensity, and situations in which activity should be avoided differed considerably. Some participants perceived physical activity narrowly, equating it primarily with routine household chores: "Physical activities mean doing day-to-day household works only during the pregnancy." (P7)

In contrast, others demonstrated a broader understanding, recognizing the benefits of aerobic and moderate-intensity exercises, such as running, swimming, or brisk walking: "Physical activity includes running, swimming, walking at speed, or doing any activity that makes us sweat." (P2)

This variation suggests that although awareness of physical activity exists, it is often incomplete or inconsistent, highlighting the need for clear, evidence-based guidance on safe and effective exercise practices tailored to pregnant women's needs.

Sub-theme 1.2: Experiences of current pregnancy

Participants expressed a wide range of emotions regarding their pregnancy, spanning from joy and excitement to anxiety and stress. A few described pregnancy as a positive, long-awaited experience, emphasizing feelings of happiness and fulfilment: "I am very happy as I have been waiting for a long time to be pregnant; it feels like a joyful moment." (P8)

However, the majority of participants reported stress, anxiety, or mixed feelings, often influenced by prior pregnancy experiences, unplanned pregnancies, or physical discomforts such as nausea, fatigue, or pain: "I feel anxious, get stressed, and feel palpitations when I think about when the baby will come out." (P4)

Physical changes during pregnancy affected participants' body image and emotional wellbeing. Some embraced the changes as part of a unique experience, whereas others felt discomfort or embarrassment: "Severe changes in my body, including swollen legs and skin changes, made me feel down and walking became difficult." (P7)

These emotional experiences appeared to directly influence engagement in physical activity. Participants who felt anxious or physically uncomfortable often limited their participation in exercise due to fear of harming the baby or exacerbating their symptoms. In contrast, those with more positive perceptions of pregnancy were more open to engaging in moderate physical activity. This highlights how emotional wellbeing during pregnancy may affect motivation, confidence, and decision-making regarding safe exercise practices.

Sub-theme 1.3: Lifestyle patterns

Most participants reported predominantly sedentary lifestyles, influenced by household responsibilities, occupational demands, and physical limitations. For example, one participant described: "*Being a housewife, I involve myself in cooking, cleaning, and washing, which*

makes me tired, so I rest after that." (P5)

Another explained how body weight and fatigue reduced her motivation for activity: *"I have heavy weight and feel lazy, so instead of being active, I prefer to sit and rest."* (P7)

These accounts indicate that both domestic and occupational roles can restrict opportunities for physical activity during pregnancy. The combination of physical tiredness, competing responsibilities, and low energy levels may limit engagement in exercise, even among participants who recognize its benefits, suggesting the need for tailored guidance that considers the daily demands and physical capacity of pregnant women.

Sub-theme 1.4: Sources of information

Participants reported obtaining information about physical activity from a variety of sources. Before pregnancy, mass media, including television, radio, and social media, served as the primary sources of knowledge. During pregnancy, this was supplemented by advice and guidance from healthcare providers, peers, and family members: *"With correct diet and exercise, pregnancy can be complication-free. My friend and sister shared their experiences, and I also learned from radio and social media."* (P7)

These findings suggest that while participants had some prior awareness of the benefits of physical activity, their understanding was often fragmented and relied on informal sources. The combination of formal guidance from healthcare professionals and informal advice from family and media appears to affect both the perception and practice of exercise during pregnancy. Limited or inconsistent information may contribute to uncertainty about safe activities, intensity, and timing, influencing whether women actively engage in physical activity.

Theme 2: Experiences and influences on physical activity

This theme reflects participants' perceptions of the benefits and challenges of exercise during pregnancy. While women acknowledged its positive effects on wellbeing, fetal health, and labor, fears, fatigue, and social or family restrictions limited participation. Support from family, peers, and community resources facilitated engagement in physical activity.

Sub-theme 2.1: Perceived pros and cons of physical activity

Participants recognized multiple benefits of physical activity, including improved physical wellbeing, reduced body heaviness, enhanced fetal health, and potentially easier labor. Engaging in regular movement was seen as a way to support both maternal and fetal health and to prepare the body for childbirth: *"Physical activity will help deliver the baby more easily and reduce body heaviness after birth."* (P1)

However, concerns about safety, fatigue, and potential pregnancy complications limited some participants' engagement. Fear of miscarriage, injury, or fetal harm led to hesitation, reflecting a tension between perceived benefits and personal apprehensions: *"Activities during pregnancy, if done incorrectly, could risk miscarriage or even fetal death, as I heard from a friend."* (P5) *"Exercise makes the body more tired and can cause severe body ache."* (P7)

These perceptions demonstrate that while women recognize the importance of physical activity, anxiety about safety and personal physical limitations can restrict participation.

Sub-theme 2.2: Barriers to physical activity

Several barriers influenced engagement in physical activity. Fear of harming the fetus, physical discomfort, fatigue, time constraints, and social or familial expectations were commonly reported. Even with professional guidance, participants were sometimes discouraged by anecdotal experiences shared by relatives or peers: *"Even after consulting my midwife, I cannot involve myself in activities because of stories I heard from relatives about pregnancy complications."* (P5) *"My husband and family insist I rest, limiting my engagement in both household chores and exercise."* (P8)

These barriers reveal how personal, social, and cultural factors intersect to influence pregnant women's decisions regarding activity.

Sub-theme 2.3: Facilitators of activity

Support from family, peers, and the broader community emerged as key facilitators of physical activity. Encouragement from spouses, mothers-in-law, or friends increased motivation, reduced perceived burdens, and made exercise more manageable and enjoyable: *"My husband encourages me and wakes me up to do mild stretching at home."* (P5) *"If family members motivate us and involve themselves, activities become less boring and more sustainable."* (P10)

Peer guidance and community resources, such as free yoga or group exercise classes, also promoted participation, offering both practical instruction and social reinforcement: "Friends who had given birth previously emphasized exercise and demonstrated yoga, which helped me practice regularly." (P3) "Availability of free yoga sessions and zumba classes in the community could help those bored with home-based activity." (P9)

These facilitators suggest that social support and access to structured or guided physical activity opportunities can mitigate barriers and encourage regular engagement.

Theme 3: Experiences with healthcare providers and recommendations

This theme captures participants' interactions with healthcare providers regarding physical activity during pregnancy, as well as their suggestions to improve engagement and adherence. It highlights gaps in professional guidance and the perceived need for structured support systems.

Sub-theme 3.1: Inadequate guidance from healthcare providers

Several participants reported that healthcare staff provided minimal information about physical activity. While the need to remain active was mentioned, details on specific exercises, intensity, frequency, and safety precautions were often absent: "Nurses just said there is the need for physical activity but didn't mention what type or frequency." (P7)

This lack of practical guidance left participants uncertain about how to safely engage in physical activity, potentially contributing to anxiety and inconsistent exercise practices. The finding highlights a gap in prenatal care where women are advised to be active but are not provided with actionable, personalized instructions.

Sub-theme 3.2: Recommendations for improved participation

Participants emphasized several strategies to enhance adherence to physical activity during pregnancy. Structured guidance from healthcare professionals, including demonstrations or tailored exercise plans, was seen as critical to building confidence and ensuring safety: "Regular exercise, yoga, and meditation can decrease stress and keep us in a happy mood. Don't forget to involve in physical activity regularly." (P5)

Family support, particularly from spouses or elders,

was identified as an essential facilitator, helping women manage household responsibilities while remaining active. Participants also highlighted the importance of accessible community resources, such as free yoga sessions or group exercise classes, to provide motivation, social engagement, and variety: "Availability of free yoga sessions and zumba classes in the community could help those bored with home-based activity." (P9)

These recommendations illustrate that promoting physical activity during pregnancy requires a multifaceted approach, integrating professional guidance, family encouragement, and community-based resources to support consistent and safe engagement.

DISCUSSION

This study explored pregnant women's experiences and perceptions of physical activity, focusing on awareness, lifestyle patterns, perceived benefits and risks, and influencing factors. Findings indicate that many participants equated routine household chores with adequate physical activity, reflecting limited understanding of recommended prenatal exercise. Some participants perceived physical activity as performing day-to-day domestic tasks rather than engaging in structured or moderate-intensity exercises. This aligns with findings reported by Findley et al.¹³ where women often considered domestic work sufficient for maintaining activity during pregnancy. Even among women aware of formal exercises, anxiety, fatigue, and body image concerns constrained engagement, indicating that awareness alone does not guarantee participation.

Pregnancy was perceived as a physically and emotionally challenging period. Feelings of anxiety, stress, and low morale, exacerbated by discomforts such as breast tenderness, leg swelling, and headaches, led women to prefer sedentary behaviour. Some participants feared that physical activity could harm the foetus, illustrating how perceived risk influences engagement. These findings are consistent with prior studies showing that fatigue, pregnancy-related discomfort, and concerns about foetal safety reduce participation in physical activity.^{14,15} Cultural beliefs and anecdotal experiences further reinforced misconceptions about exercise-related risks, such as miscarriage or fetal harm.¹⁶ These results emphasize the need for interventions that address both knowledge gaps and culturally rooted fears.

Participants obtained information about physical activity from informal sources including social media, television, radio, and peers, and from formal sources such as healthcare

providers during antenatal visits. Guidance from family and healthcare professionals was valued, yet participants noted gaps in detailed instruction. Similar patterns were observed by Weir et al.¹⁷ who found that women often relied on informal sources rather than professional advice when making decisions about prenatal exercise. In this study, reliance on mixed information sources sometimes reinforced inaccurate beliefs about exercise safety, highlighting the importance of consistent, evidence-based guidance.

Participants recognized multiple benefits of physical activity, including enhanced maternal wellbeing, facilitation of labor, reduced postpartum heaviness, and improved recovery. These findings align with evidence showing that moderate prenatal exercise positively affects delivery outcomes and maternal health.^{18,19} However, perceived risks, such as miscarriage or body pain, limited engagement, illustrating the balance between expected benefits and apprehensions. This finding is consistent with literature identifying safety concerns and insufficient^{13,21}

Social and familial support emerged as a major facilitator. Encouragement from spouses, mothers-in-law, and peers enhanced motivation and adherence to activity, whereas lack of support or restrictive family expectations hindered participation. These findings are consistent with Harrison et al.¹⁴ and Santos et al.²⁰ who reported that social support and family involvement significantly influence adherence to prenatal exercise. Practical support, such as shared activity or reduced household workload, was particularly effective in promoting sustained engagement.

Healthcare provider interactions also influenced experiences. Participants reported that antenatal visits were constrained by long waiting times, unfriendly staff, and limited instruction on exercise type, intensity, and frequency. These factors discouraged engagement with professional advice and reinforced reliance on informal sources. Similar findings were reported by Evenson et al.,²² emphasizing that inadequate counselling and poor communication contribute to low adherence to physical activity during pregnancy. Participants recommended that healthcare providers offer clear instructions, demonstrate exercises, and integrate guidance on nutrition and exercise scheduling into antenatal care.

Overall, engagement in physical activity during pregnancy is influenced by knowledge, perceived risks, physical wellbeing, social support, and healthcare guidance. Compared with prior research, this study highlights the interplay of psychological, cultural, and practical barriers

alongside informational gaps, emphasizing the need for interventions that combine clear communication, culturally sensitive education, and active involvement of family and community resources to improve adherence to recommended prenatal physical activity.

This study has several limitations. First, the sample was small and drawn from a single hospital setting in Pokhara, which may limit the transferability of findings to other regions or populations. Second, participants were recruited through antenatal clinics, potentially excluding women who do not access formal healthcare. Third, reliance on self-reported experiences may introduce recall bias or social desirability bias. Finally, although thematic analysis was rigorously applied, the study's qualitative design inherently limits generalizability. Despite these limitations, the findings provide in-depth insight into the experiences and perceptions of pregnant women regarding physical activity, offering valuable guidance for culturally sensitive interventions and antenatal care strategies.

CONCLUSIONS

The study demonstrates that while pregnant women generally recognize the importance of physical activity, knowledge about appropriate types, frequency, and safety of exercise is limited. Many equate household chores with sufficient activity, and sedentary lifestyles are common due to fatigue, low motivation, and inadequate guidance. Barriers such as fear of harming the fetus, cultural beliefs, and limited family support reduce engagement, whereas encouragement from spouses, peers, and healthcare providers facilitates participation. Inadequate counseling and lack of structured antenatal exercise programs further hinder active participation.

These findings highlight a critical gap in knowledge translation and antenatal care practices, emphasizing the need for context-specific, evidence-based interventions. Structured education on safe prenatal exercises, integrated into routine antenatal care, is essential. Healthcare providers should receive training to deliver practical guidance and demonstrate exercises effectively. Engaging family members, particularly spouses, in supporting pregnant women's physical activity can enhance adherence. Furthermore, community-level programs and targeted media campaigns can reinforce awareness, promote safe practices, and create supportive environments for maternal well-being. Implementing these strategies can help bridge knowledge gaps, address barriers, and foster sustained engagement in physical activity during pregnancy.

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AUTHORS' CONTRIBUTIONS

SP conceptualized the study and led manuscript preparation. DKC critically reviewed and revised the manuscript. SG, DKC, RG contributed to the study design, data collection, analysis, and manuscript review. All the authors read and approved the final manuscript.

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