



Development and validation of pelvic floor education program among postnatal women. A mixed method

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Background

- Pelvic floor muscles training (PFMT) is the first-line treatment for managing pelvic floor dysfunctions (PFD) like urinary incontinence (UI), pelvic organ prolapse (POP), and anal incontinence (AI).
- In Nepal, studies report varying prevalence of pelvic floor disorders, with community surveys showing 3–8.5% urinary and prolapse symptoms, clinic data indicating up to 41% prolapse, and postpartum figures revealing 30% UI, 19% POP, and some AI at 12 months.

(Chen CC et.al 2020)

Background/2

- Globally, there is low knowledge of pelvic floor health which is associated with a higher risk of developing pelvic floor dysfunction.

(Madombwe et al,2010)

- Health professionals often don't provide enough information to women about pelvic floor issues and women themselves might not know much about these problems so they don't seek for the treatment.

(Milsom et al, 2012)

- In studies done in Nepal shows poor knowledge of PFM and many people in Nepal believe that PFD happens only due to aging.

(Giri S, 2023)

Background/3

- Education on pelvic floor dysfunction improve symptoms and quality of life in women with pelvic floor dysfunctions.
(Karaaslan et al, 2022)
- PFMT is effective in preventing and treating urinary incontinence, improving PFM function, reducing symptom severity, and enhancing quality of life.
- There is need for a structured program that covers PFM anatomy, function, dysfunctions, and treatment options.

Objective of the study

General Objective :

- To develop the comprehensive pelvic floor education program.

Specific Objective :

- To assess the face validity and content validity of pelvic floor education program.

Methodology

- Study Design and Setting
Mixed-method study conducted from May 2024 to February 2025
- Study site
Dhulikhel Hospital, Nepal
- Framework used
Medical Research Council (MRC) framework
COSMIN guidelines for validation
- Ethical approval obtained (IRC: 207/24)

- Participants

Postnatal women admitted at Dhulikhel Hospital

- Inclusion Criteria:

Women after normal or cesarean delivery

- Exclusion Criteria:

Unwilling to participate

Communication difficulties

Postnatal complications (e.g., depression, trauma)

Developmental Phase

1. Identification of Need

Interviews with 8 postnatal women

Identified knowledge gaps and concerns

2. Literature Review

Databases: PubMed, Google Scholar, Cochrane
Evidence from systematic reviews and RCTs

3. Designing Program

Development of pamphlet with simple language and visuals

Validation Phase

1. Face Validity

Assessed among 50 postnatal women and evaluated clarity, understanding, and relevance

Minor modifications based on feedback

2. Content Validity

Evaluated by expert panel

Assessed relevance, appropriateness and usefulness

3. Content Validity Index (CVI)

Items rated as essential / useful or non-essential/non-useful

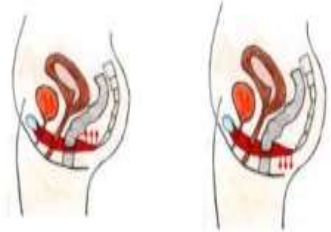
CVI calculated for all domains

Results

- A pelvic floor muscle exercise (PFME) education program was successfully developed and validated in nepali language.
- Final education program included: 6 domains and 38 items.
- Domains covered:
 1. Anatomy and physiology of pelvic floor
 2. Pelvic floor dysfunctions
 3. Symptoms of pelvic floor dysfunctions
 4. Risk factors of PFD
 5. Pelvic floor exercises
 6. Precautions to be taken

पेल्विक फ्लोर मासपेशीको कसरत

पेल्विक फ्लोर मासपेशीहरूलाई कसरत माथि तान्ने र १० सेकेण्ड सम्म तानि राख्ने । त्यस पछि ३ मिनेट धारण गर्ने । यही प्रक्रिया १० पटक सम्म दोहोर्याउने । यो कुनैपनि आरामकारी अवस्थामा कुनैपनि समयमा गर्न सकिन्छ । यो कसरत विनामा ३ पटक दोहोर्याउने र कसरत गर्दा सास साईं नरोक्ने, पैट, चाक र निद्राको मासुलाई नकच्ने ।



पेल्विक फ्लोर मासपेशी खुल्नुका

पेल्विक फ्लोर मासपेशी खुक्नुको हुँदा

नोट: हरेक लक्षित, पेल्विक फ्लोर सिडिभिडिटीबाटलेन अरुने पेल्विक फ्लोरको जोर नो चारुडि दिनु अरुकरु ।

हजार दिनुपर्ने कुराहरु

- ▶ गर्भको भारी बसाल उचान्नु अघि पेल्विक फ्लोर मासपेशी कसरत माथि तान्ने र बसाल उचान्नु नैसम्म तानि राख्ने
- ▶ दिमा गर्दा बेच्योरी नकच्ने
- ▶ कामको बीचमा आराम गर्ने
- ▶ कुनै पनि क्रियाकलाप गर्दा सास नरोक्ने

समन्वय, दुईसकाम अस्पताल ।



मुल्की महिलाका लागि पेल्विक फ्लोर कसरत शिक्षा कार्यक्रम

विषय सूची

- ▶ पेल्विक फ्लोरको बनावट र काम
- ▶ पेल्विक फ्लोरमा हुने समस्याहरु
- ▶ पेल्विक फ्लोर समस्याका लक्षणहरु
- ▶ पेल्विक फ्लोर समस्याका जोखिमका कारकहरु
- ▶ पेल्विक फ्लोर मासपेशीको कसरत
- ▶ ध्यान दिनुपर्ने कुराहरु

पेल्विक फ्लोरको बनावट र काम

पेल्विक फ्लोर मासपेशीको समूह हो, जुन सर्वाङ्ग कम्मरको हठी बाट पछाडि हाडको पुच्छो हुँदै सम्म जोडिन्छ । पेल्विक फ्लोरमा छेउ मासपेशीहरू हुन्छन् जसले पिसाब वेसी, पाठेघर र दिमा नली लगायत छेउे मासपेशीको अङ्गहरूलाई साम्ने पार्दछन् । पेल्विक फ्लोरका मासपेशीहरूले पिसाब र दिमा फुलिन नदिने, जाड बस्ने समस्या बाट बचाउने, बोन अफ समर्थन गर्ने, उरोजना बसाला रगतको प्रवाह बडाउने, सर्वाङ्गित मासपेशीको सकुचनद्वारा चरम सुख (अर्थात् ज्ञान र श्वासप्रश्वासमा महत्वपूर्ण भूमिका खेल्नेको हुन्छन् ।



पेल्विक फ्लोरमा हुने समस्याहरु

- ▶ पिसाब फुट्नु
- ▶ दिमा फुट्नु - पाठेघर आँफो नियन्त्रणमा राख्न नसक्नु
- ▶ जाड बस्नु/पेल्विक अङ्गहरू, जसले, पिसाब वेसी, पाठेघर र दिमा नली, आँफो स्थान बाट तान्नु
- ▶ पोलि सकोच पोलीको मासपेशीहरू बडा नईराख्नु जसले गर्दा पोलि सम्बन्धमा दुखाई वा असुख हुनु
- ▶ पेल्विक फ्लोर मासपेशीहरूको तानमेल नोपनु

पेल्विक फ्लोर समस्याका लक्षणहरु

- ▶ पोलीमा साँपिन, तानि राख्ने वा दुखाई
- ▶ पोलीबाट केही बाहिर आएरसर्ने
- ▶ पिसाब सुख गर्ने वा पुर्णरूपमा पिसाब फेर्ने बढिनाई
- ▶ खोक्रा, हान्सा वा कसरतगर्दा पिसाब फुट्नु
- ▶ तन्वी पैट, हाड वा कम्मर बाँपरीको दुखाई
- ▶ दिमा वा पाठेघर नियन्त्रण गर्न बढिनाई
- ▶ कोचबान

नोट: जोखिमिल लक्षणहरु देखिएपछि स्वास्थ्य परामर्श लिनु आवश्यक छ ।

पेल्विक फ्लोर समस्याका जोखिमका कारकहरु

- ▶ छेउ पटक गर्भकाली वा बच्चा जन्माउने
- ▶ बढी उमेर
- ▶ मोटोपना - अतिरिक्त तौल
- ▶ लामो समय देखिको खोकी वा लम्बो भारी उठाउने
- ▶ अनुपयोगिक वा बन्धनपूर्ण
- ▶ हर्मोनल परिवर्तनहरु
- ▶ पेल्विक क्षेत्रको सर्वाङ्गिकता

Cont..

- Qualitative Findings

1. Lack of awareness regarding pelvic floor health among postnatal women
2. Difficulty understanding medical terminology like pelvic floor, dyssynergia etc.
3. A proportion of participants reported prior exposure to PFME-related information, facilitating better comprehension.
4. Participants perceived the education program as relevant, useful, and applicable to their needs.

Cont...

- Content Validity Index (CVI) = **+1**
Indicates excellent content validity
- Majority reported:
 - Easy to understand
 - Relevant and useful
- Overall, program demonstrated good face validity and acceptability.

Conclusion

1. The pelvic floor education program for postnatal women in Nepal was successfully developed and validated.
2. This education program is now ready for clinical use to enhance awareness of pelvic floor dysfunctions.
3. It is intended to support the prevention of PFD by strengthening women's knowledge and encouraging correct exercises practices.
4. The impact of pelvic floor education program on knowledge, attitude and practices should be explored in future studies.

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THANK YOU