Nature of Television Childbearing Shows and Mode of Delivery Preferences among Primiparous Women in Nairobi, Kenya

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Abstract

Purpose: To examine the effects of different types of TV childbirth shows on mode of delivery preferences among primiparous women in Nairobi, Kenya.

Methodology: The study utilized a sequential mixed-methods approach, which involved 300 purposefully selected primiparous women from eleven sub-counties in Nairobi during routine child immunization schedules. Among the participants, 150 had vaginal deliveries, while the remaining underwent elective caesarean deliveries. Data collection was carried out through interviewer-administered questionnaires, focus group discussions, and in-depth interviews. Quantitative analysis involved the use of mean-weight scores, Chi-square tests, and Cramer’s V using SPSS. Thematic analysis was conducted for qualitative data to comprehensively understand the research topic. The findings were presented through both numerical analysis and narrative exploration.

Findings: Respondents who had elective caesarean deliveries scored higher in locating childbirth lessons and interest in viewing childbirth scenes. Vaginal delivery scored higher for observing long-term childbirth messages, with similar scores for reasons of watching TV childbirth shows. Talk shows were the most effective for childbirth learning (φc = 0.52), with a small effect size for interest in viewing. Additionally, choosing mode of delivery as a repeated long-term message and having an idea of maternity as a reason for viewing had moderate size effects. The null hypothesis was rejected due to a significant correlation, with the ANOVA model explaining 87.9% of the variability. Locating lessons increased odds by 21.9%, repeated messages by 1.2%, and reasons for viewing by 3.3%, while interest in viewing childbirth scenes was not significant in the logistic regression. Qualitative analysis confirmed the rising prevalence of childbirth shows on mainstream TV.

Unique Contribution to Theory, Practice and Policy: The study highlights how TV childbirth shows shape expectations and guide decisions regarding mode of delivery, contributing to media effect theories. In practice, healthcare workers need to actively engage with the content to address fears, concerns, and misconceptions influenced by these shows. Collaboration with content producers is crucial for authentic portrayals. Additionally, the study emphasizes the importance of media literacy programs and evidence-based guidelines to enhance informed decision-making.

Keywords: Primiparous Women, TV Childbirth Shows, Mode of Delivery Preferences, Media Effects Theories, Cesarean Birth Rates
INTRODUCTION

Television occasionally depicts childbirth scenes that contribute to comprehension of the process and provide a unique chance for women to observe childbirth before experiencing it (Roberts & De Benedictis, 2021). The increasing depiction of childbirth on TV and internet access has made it easier to view the entire process of childbirth from beginning to end (Bor, 2013; Vitek & Ward, 2019). TV has the potential to dispel misconceptions but has transformed fear of childbirth from the unknown to the known through its portrayal (Arfaie et al., 2017).

Televised childbirth practices and interventions are increasingly being adopted, either directly or indirectly, over time (Roberts et al., 2021; Shrum, 1995; Zillmann & Wakshlag, 2013). This can be attributed to the fact that television has the ability to transcend all borders and emotionally engage viewers, thereby influencing their expectations and preferences regarding childbirth practices and interventions (Luce et al., 2016; Rublein & Muschalla, 2022; Shanahan & Morgan, 1999). In this context, requesting interventions could be a proactive attempt to minimize the potential risks or injuries associated with childbirth and assert control over the unpredictable nature of the process (Androutsopoulos, 2018; Boerma et al., 2018).

Requesting or demanding a cesarean delivery presents ethical challenges that require a careful consideration of autonomy, beneficence, non-maleficence, and justice, while also ensuring equitable treatment based on available resources (I. Chen et al., 2018; Eide & Bærøe, 2021; Nilstun et al., 2008; Prado et al., 2018; Romanis, 2019; Sung & Mahdy, 2021; Tunc et al., 2015). It is essential to prioritize autonomy in childbirth decisions, giving precedence to medical necessity rather than non-medical factors particularly in resource-limited countries like Kenya. In 2021, Kenya recorded a maternal mortality rate of 362 deaths per 100,000 births, all of which could have been prevented with timely access and safe cesarean sections (Human Reproductive Health, 2021; Tunc et al., 2015). Equitable access is imperative, prompting an examination of whether television childbirth programs influence delivery preferences and decisions.

Statement of the Problem

Opting for elective caesarean delivery raise concerns as 25% of all maternal deaths during childbirth in Kenya result from caesarean use, regardless of indication (Human Reproductive Health, 2021; Sobhy et al., 2019; WHO, 2016). Sociocultural perceptions are believed to drive the demand for and over use of caesareans (Akram & Afzal, 2023). The study aims to understand how nature of TV childbirth shows shapes mode of delivery preferences among women without prior experience and addresses the need for a well-informed strategies to prevent health risks and reduce costs.

Objective

To examine the effects of nature television childbirth shows on mode of delivery preferences among primiparous women in Nairobi, Kenya.

LITERATURE REVIEW

Television is a powerful cultural artifact that influences individual habits and cultural beliefs (Morgan et al., 2009). This has been used to explain the likelihood of engaging in various behaviors such as crime, substance abuse, heterosexuality, cosmetic surgery, and environmental beliefs.
The hospitalization of childbirth reduces the chances of seeing it take place, but television provides an indirect way to observe the process, making it a regular topic despite being previously a taboo (Jeffres et al., 2001; Roberts & De Benedictis, 2021). Internet access facilitates convenient viewing of hospital birthing scenarios, emphasizing positions, decisions, and reinforcing the perception of childbirth as pathological (Leahy, 2023; McKelvin et al., 2021). Contemporary shows use medical jargon and professional scriptwriting to enhance entertainment, providing valuable insights into childbirth, particularly for those lacking personal experiences (X. Chen et al., 2018; Hoffman et al., 2023; Roberts & De Benedictis, 2021). TV portrayal has transformed fear of childbirth from the unknown to known (Cummins, 2020; Gagnon, 2021). This could potentially be a contributing factor to the global overuse of cesarean delivery, which currently make up 21% of all births (I. Chen et al., 2018; Wu et al., 2023).

Each year, the World Health Organization estimates over 6.2 million unnecessary cesarean deliveries projecting that by 2030, 29% of all births will be through cesarean sections (Sobhy et al., 2019). In Africa, is characterized with both overuse and underuse. West Africa and regions with civil unrest have rates below 5%, while Egypt has the highest rate at 63%. (Boerma et al., 2018; Wahdan et al., 2022). Nationally, Kenya's cesarean rate is increasing from 7.6% to 9.5%, with variations across all 47 counties. Nairobi and Kiambu have the highest rate at 24.9%, while Mandera, Narok, Tana River, and Wajir have the lowest at less than 2% (MOH, 2016. pg 62).In regions with cesarean rates below 10%, increasing usage significantly lowers mortality, but in areas with rates of 10-30%, overuse doesn't improve outcomes but instead leads to harm (WHO, 2015).

While existing literature extensively explores factors influencing mode of delivery preferences among women. Leahy (2023) conducted oral history interviews in Austria, while Hoffman et al. (2022) focused on childbirth depiction in a scoping review. Additionally, Roberts and De Benedictis (2021) examined the potential influence of television on childbearing women's expectations and experiences. Despite these studies, a significant gap remains in understanding the influence of television childbirth shows on women who have recently become mothers for the first time. Our study aims to address this by utilizing a mixed-methods approach to explore the correlation between rising cesarean rates and television childbirth portrayals. Message system analysis, as described by Morgan et al.(2009), was used to identify and assess recurring themes, images, or values across various programs. Nature of television childbirth shows was not restricted to any particular program type or genre but rather constituted a set of factors, including locating potential childbirth lessons on TV, interest in viewing childbirth scenes, repeated long-term TV childbirth messages, and reasons for viewing TV childbirth shows. Respondents were not directly questioned about television itself. Instead, answered questions about potential lessons acquired from viewing, which was hypothesized as H0; there is no significant relationship between nature television childbearing shows and mode of delivery preferences among primiparous women in Nairobi, Kenya.
Theoretical Framework

The study was guided by Cultivation Theory, proposed by George Gerbner in 1969, and the Medicalization of Society theory articulated by Zola (1972), Illich (1976), and Conrad (1992). These theories provided valuable frameworks for comprehending the impact of media and medicalization processes on preferences for mode of delivery. Cultivation explained how repeated and prolonged exposure to specific television childbirth depictions over time cumulatively and significantly influences individuals' perceptions of reality. On the other hand, Medicalization of Society theory proposes media plays a role in framing non-medical aspects of life, such as childbirth, as medical issues, thereby influencing societal norms and practices. By integrating these theories, the research question and analysis of television shows depicting childbirth and the medicalization processes that influence mode of delivery preferences among primiparous women in Nairobi, Kenya were guided, resulting in valuable insights.

METHODOLOGY

The study employed a sequential explanatory mixed-methods design, integrating both quantitative and qualitative approaches to comprehensively address the study objective (Creswell, 2012; Johnson & Onwuegbuzie, 2007). Data collection adhered to all ethical standards and regulations. Potential respondents were identified during routine newborn immunization sessions using the Maternal and Child Health booklet (MOH, 216). Page 5 provided information on previous pregnancies, while page 16 provided details on the mode of delivery used. A total of 300 primiparous women completed interviewer-administered questionnaires, with 50% having undergone a primary elective cesarean and the remainder opting for vaginal birth. Consent was obtained prior to 35-45 minute interviews, during which respondents were allowed to ask questions. The collected data was analyzed, guiding the subsequent qualitative phase of the study. In this second phase, three focused group discussions were conducted with individuals identified as rich informants during the questionnaire administration. Additionally, six in-depth interviews were conducted, each involving two individuals from the categories of healthcare providers, medical insurance providers, and television program producers. Quantitative data analysis included both descriptive and inferential techniques, with the aid of SPSS software version 28.0.1.1(15) to compute mean-weight scores and conduct inferential analysis. The significance of the association between categorical variables was assessed using the Chi-square test, while the strength of this association was established using Cramer's. Subsequently, qualitative data from focus group discussions (FGDs) and in-depth interviews were translated to English using the Swahili to English Translator APK App Version 2.8.3 and transcribed verbatim using Nvivo 12 automated transcription software for thematic analysis.

RESULTS AND DISCUSSIONS

Response Rate

The initial sample of 320 was oversampled by 20% (384) to allow for dropout and attrition. Out of 370 approached, 300 completed the questionnaire, yielding a response rate of 93.75%, deemed sufficient for comprehension and inferences. The qualitative phase resulted in a 100% response rate from all participants in FGDs and in-depth interviews, as they answered all questions posed.
Descriptive Findings

Both groups expressed positive views, with weighted mean scores exceeding 2 for each variable. Respondents who had elective caesareans scored higher in locating childbirth lessons in medical dramas (3.51 vs. 3.21), reality TV shows (3.18 vs. 3.15), and soap operas (2.81 vs. 2.69). While vaginal delivery scored higher on comedy shows (2.44 vs. 2.31) and talk shows (3.59 vs. 2.0), interest in viewing childbirth scenes was slightly higher for elective caesarean (2.97 vs. 2.9). The frequency of observing long-term childbirth messages vaginal delivery scored higher in witnessing childbirth outside hospital (2.76 vs. 2.59), childbirth interventions (4.08 vs. 3.91), and pain relief methods (3.83 vs. 3.77). While elective caesareans scored higher in complications (3.51 vs. 3.48) and choosing the mode of delivery (3.69 vs. 2.35). The reasons for watching TV childbirth shows elective caesareans scored higher for witnessing childbirth (3.96 vs. 3.83) and having an idea of maternity (3.99 vs. 3.53), while normal delivery had a higher score for coping with childbirth (4.26 vs. 4.17).

Inferential Findings

Table 1 provides a summary of Chi-square tests and Cramer's V results on nature of television childbearing shows and mode of delivery.

Medical dramas, soap operas, comedy, and talk shows preferences had significant associations (p<0.05) as potential locations for childbirth lessons on TV, with talk shows demonstrating the strongest association (φc = 0.52). Interest in viewing childbirth scenes had a significant association, but with a small effect size (φc = 0.22). Repeated long-term childbirth messages had a significant correlation with choosing mode of childbirth, having a moderate effect size (φc = 0.48). Viewing to have an idea of maternity had a significant correlation with a moderate effect size (φc = 0.32), while witnessing and coping with childbirth had a non-significant correlation with

<table>
<thead>
<tr>
<th>Variable</th>
<th>Topic</th>
<th>χ²</th>
<th>df</th>
<th>p</th>
<th>φc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locations of potential childbirth lessons on TV</td>
<td>Medical dramas</td>
<td>11.5997</td>
<td>4</td>
<td>0.0206*</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>Reality TV show</td>
<td>0.7683</td>
<td>4</td>
<td>0.9426</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>Soap operas</td>
<td>10.8226</td>
<td>4</td>
<td>0.0286*</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>Comedy</td>
<td>0.9734</td>
<td>4</td>
<td>0.9138</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>Talk shows</td>
<td>81.9039</td>
<td>4</td>
<td>&lt;0.001***</td>
<td>0.52</td>
</tr>
<tr>
<td>Interest of TV viewing</td>
<td>Viewing childbirth scenes</td>
<td>15.0739</td>
<td>4</td>
<td>0.0046*</td>
<td>0.22</td>
</tr>
<tr>
<td>Repeated long-term TV childbirth messages.</td>
<td>Child birth outside hospital</td>
<td>33.3099</td>
<td>4</td>
<td>&lt;0.001*</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>Medical interventions</td>
<td>7.0841</td>
<td>4</td>
<td>0.1315</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Pain relief methods</td>
<td>12.9409</td>
<td>4</td>
<td>0.0116*</td>
<td>0.21</td>
</tr>
<tr>
<td></td>
<td>Complications</td>
<td>32.1674</td>
<td>4</td>
<td>&lt;0.001**</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>Choice on mode of birth</td>
<td>70.1999</td>
<td>4</td>
<td>&lt;0.001***</td>
<td>0.48</td>
</tr>
<tr>
<td>Reasons for viewing TV childbirth shows</td>
<td>Witness childbirth</td>
<td>6.2139</td>
<td>4</td>
<td>0.1837</td>
<td>0.14</td>
</tr>
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<td></td>
<td>Idea of maternity</td>
<td>30.9607</td>
<td>4</td>
<td>&lt;0.001**</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>Cope with childbirth</td>
<td>4.528</td>
<td>4</td>
<td>0.3392</td>
<td>0.12</td>
</tr>
</tbody>
</table>

** p < .01, * p < .05, p ≥ .10 (α = .05).

a small effect size on the preferred mode of delivery.
The significant correlation between television childbirth shows and mode of delivery preference was established ($\chi^2 = 322.62$, df = 69, p < 0.001), resulting in the rejection of the null hypothesis ($H_0$). Analysis of Variance (ANOVA) resulted in a highly significant model ($F (14, 286) = 148.647$, $R^2 = 0.879$, p < 0.001), explaining 87.9% of the variability. Table 2 presents the results of the logistic regression analysis.

### Table 2: Logistic Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coef.</th>
<th>Odds Ratio</th>
<th>95% CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-1.234</td>
<td>0.290</td>
<td>&lt; 0.001*</td>
<td>-</td>
</tr>
<tr>
<td>Location of childbirth lessons</td>
<td>0.198</td>
<td>1.219</td>
<td>[1.043, 1.431]</td>
<td>0.001**</td>
</tr>
<tr>
<td>Interest in childbirth scenes</td>
<td>0.016</td>
<td>1.016</td>
<td>[0.962, 1.072]</td>
<td>0.581</td>
</tr>
<tr>
<td>Repeated TV childbirth messages</td>
<td>0.012</td>
<td>1.012</td>
<td>[1.000, 1.024]</td>
<td>0.049**</td>
</tr>
<tr>
<td>Reasons for TV childbirth</td>
<td>0.033</td>
<td>1.033</td>
<td>[1.008, 1.059]</td>
<td>0.00370**</td>
</tr>
</tbody>
</table>

Nature of TV childbearing shows significantly influenced choices, with locating childbirth lessons on TV associated with a 21.9% rise in the odds (95% CI [1.043, 1.431]). Exposure to repeated long-term TV childbirth messages increased odds by 1.2% (95% CI [1.000, 1.024]), and reasons for viewing TV childbirth shows raised odds by 3.3% (95% CI [1.008, 1.059]). However, interest in viewing childbirth scenes had no significant impact (odds ratio = 1.016, 95% CI [0.962, 1.072]).

The qualitative analysis confirmed that childbirth depictions and practices are prevalent on mainstream TV, with Grey's Anatomy, Call the Midwife, This is going to hurt, and One Born Every Minute being the most watched, while Game of Thrones was the least watched. One FGD participant stated

*I have actively and passively encountered childbirth shows on TV as a regular viewer.*

FGD participants found TV childbirth-related shows informative and engaging but expressed concerns about dramatization and authenticity. Suggesting personal experiences and preferences significantly influence individuals' perceptions and approaches towards viewing TV childbirth-related content. Another participant in the FGD commented.

"*Childbirth shows on TV are fascinating and informative, especially for those with no personal childbirth experience.*"

A TV content producer mentioned,

*We aim for a balance between realism and entertainment in our childbirth-related shows, engaging the audience while providing educational value."

The significance of the childbirth shows was confirmed by a Healthcare workers stating

"*Childbirth on TV is common, and we cannot go on ignoring its impact, and if we choose to do so, we must invest in and prepared for health issues that will arise in babies born via cesarean later in life. It’s time for accurate portrayals and increased awareness.*"

Television portrayals of childbirth influence viewers' perceptions, while healthcare workers emphasize real-life decision-making. FGD participants watch shows for entertainment, insight, coping strategies, and personal reassurance.
Discussion

Using a message system analysis, the study established the influence of nature of television childbirth shows on mode of delivery preferences among primiparous women in Nairobi. Both groups expressed positive views, with weighted mean scores exceeding 2 for each variable. Among the different types of shows, talk shows had the strongest association, while repeated long-term messages and viewing to get an idea of maternity had moderate effect sizes. Whereas interest in viewing childbirth scenes had a small effect, the rejection of the null hypothesis was substantiated by a significant correlation, and the regression analysis resulted in a highly significant model, explaining 87.9% of the variability. Nature of TV childbirth shows significantly influences choices, with locating childbirth lessons increasing odds by 21.9%, repeated messages by 1.2%, and reasons for viewing by 3.3%.

The findings align with the increasing prominence of childbirth topics on television, as highlighted in Roberts & De Benedictis (2021) scoping review. Similarly, Bessett and Murawsky (2018) study found that all pregnant women in the New York-Connecticut area had encountered fictional pregnancy representations, with 44% regularly watching TV programs on childbearing. Despite frequent sensationalizing, interest in viewing childbirth scenes had a modest effect size and was not a significant predictor. According to Gagnon (2021), the programs effectively convey and reinforce intergenerational values about the process, leaving a lasting impression, and Cummins (2020) affirms the potential enduring impact of depictions. The small size effect may possibly be due to biased self-reported data and a cross-sectional design, cautioning against broad generalizations. Similarly, viewing to witness and cope with childbirth had a small effect size, contrary to Roberts & De Benedictis (2021) and Hoffman et al. (2023) as television provides a unique opportunity to observe childbirth, aiding in the development of coping strategies and seeking personal reassurance during delivery.

The influence of television on childbirth behavior is significant, shaping perceptions, promoting interventions, and emphasizing the importance of autonomy. This study enhances our understanding of television programming's impact on childbirth perception, offering valuable insights for healthcare professionals, policymakers, and media practitioners. It highlights television's substantial role in first-time mothers' decision-making regarding their preferred mode of delivery. Unanswered questions and avenues for future research include exploring how different cultures might be affected by TV content and developing interventions to improve media literacy among inexperienced women. Healthcare professionals should engage with TV programming to address fears, concerns, and correct misperceptions, collaborating with content producers for authentic portrayals. Additionally, evidence-based guidelines are essential for promoting informed choices.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The study highlights the influential role of television childbirth shows in shaping mode of delivery preferences among women without prior childbirth experiences in Nairobi, Kenya. These findings highlight the need for targeted interventions to support informed maternal decision-making and
lays groundwork for further research on the relationship between media exposure and childbirth decisions.

**Recommendations**

The study aimed to enhance existing media effect theories regarding healthcare behavior and beliefs, focusing specifically on mode of delivery preferences. The study found that television childbearing shows are used to gain insights into what to expect during childbirth, providing reassurance on how to navigate the process correctly. Healthcare professionals should actively engage with television programming to be able address fears, concerns, and correct misperceptions. Collaborating with television content creators and producers becomes essential to creating more authentic portrayals of childbirth and labor.

**Suggestions for Further Studies**

The study suggests further research to address the identified limitations and enhance our understanding of childbirth preferences and decision-making. The study recommends examining the impact of television on different cultures, collection of localized cesarean birth rate data to avoid relying solely on the WHO's 30% estimate for unnecessary cesareans, prioritizing detailed Robson classification data on parity and calls for additional research focused on young mothers under 18, multiparous women, and men. Additionally, advocates for a longitudinal study to understand the evolving influence of television childbirth shows on preferences and decision-making over time.
REFERENCES


