Causes and consequences of unintended pregnancies in the Gaza-Strip: A qualitative study

Bettina Böttcher, PhD\textsuperscript{1}, Mysoon Abu-El-Noor, PhD\textsuperscript{2}, Nasser Abu-El-Noor, PhD\textsuperscript{2}

1 Associate Professor at the Faculty of Medicine at the Islamic University of Gaza

2 Associate Professor at the Faculty of Nursing at the Islamic University of Gaza

Bettina Böttcher, PhD (corresponding author)

Faculty of Medicine
Islamic University of Gaza
P. O. Box 108, Gaza
Gaza Strip, Palestine
Bettina.bottcher@yahoo.co.uk

Mysoon Abu-El-Noor, PhD

Faculty of Nursing
Islamic University of Gaza
P. O. Box 108, Gaza
Gaza Strip, Palestine
maziz@iugaza.edu.ps

Nasser Abu-El-Noor, PhD

Faculty of Nursing
Islamic University of Gaza
P. O. Box 108, Gaza
Gaza Strip, Palestine
naselnoor@iugaza.edu.ps

\textbf{Word count abstract:} 250

\textbf{Word count main text:} 2497
Abstract

Background
Little is known about unintended pregnancies in the Gaza Strip. Therefore, this study explores causes and consequences of unintended pregnancies among women in the Gaza Strip.

Methods
This is a qualitative study, including 21 women who had experienced unintended pregnancies. Data collection took place in three focus groups of 5 – 12 participants, which were attended by participants and one female researcher. Structured questions were asked and answers were invited. All sessions were audiotaped and transcribed into words. These were read by all researchers to extract themes.

Results
The mean age of participants was 34.2±6.0 years, parity was 2.7±6.6 and 16 participants (76.2%) had benefitted from secondary level education or above.

Five main themes were identified: (1) economic hardship was one of the main reasons for pregnancies to be unwanted, (2) high pressure was exerted on women to have more male babies, frequently exposing women to gender based violence (3) advanced maternal age was perceived as a social stigma (4) complete lack of support for women facing unintended pregnancy led to self-management of terminations including attempts of unsafe methods and (5) changes of methods and incorrect use leading to contraceptive failure was the most frequent cause.

Conclusions
Unintended pregnancies in the Gaza-Strip are a common cause of distress for women. The most effective way of preventing unintended pregnancies remains access to reliable contraception. However, a service designated to support women facing unintended pregnancies is needed in the Gaza Strip. Local policy makers have to address this when planning healthcare services.
**Key words:** unintended pregnancy, contraceptive failure, gender based violence, long acting reversible contraception, Gaza Strip, Palestine

---

**Key messages points**

- Despite neglect of the topic, unintended pregnancies are common in the Gaza Strip.
- Pressure on women for more male babies was often combined with verbal or physical violence, leading to high degrees of distress among women.
- Two-thirds of participants attempted to self-manage termination of their pregnancies, demonstrating the need to provide services for women experiencing unintended pregnancies.

---

**Introduction**

Unintended pregnancies include unwanted and mistimed pregnancies and make up around 40% of pregnancies occurring worldwide.[1] They contribute to maternal mortality and morbidity and can negatively affect children’s health.[2 3] Many studies have shown negative impact of unintended pregnancies in psychosocial, health and economic terms.[1 2] Furthermore, spacing of pregnancies with longer intervals between pregnancies, has widely been accepted to have a positive impact on maternal and children’s health.[2] Therefore,
availability of reliable contraception has been cited as a major factor in the achievement of the United Nations Sustainable Development Goals No 3 (Good Health and Wellbeing) and No 5 (Gender Equality). Universal access to good quality sexual and reproductive health services is one key strategy to improve the wellbeing of women and children.[4]

Various estimates have been given for the prevalence of unintended pregnancies ranging from 13% to 82% of pregnancies worldwide.[5-9] However, only a few studies addressing unintended pregnancies are available from the Middle East, giving a prevalence of 40% in Iran and 24% in Egypt.[5 10-12] This might be due to other more pressing health priorities in areas of conflict, war and economic hardship, but social determinants might also play a role, valuing large families and negating the occurrence of unintended pregnancies.

The Gaza-Strip poses no exception to these phenomena. However, the research team noticed that unintended pregnancies were reported frequently by women attending sexual and reproductive healthcare services and were found to be common in the Gaza-Strip.

The aim of this study was to explore the causes and consequences of unintended pregnancies in the Gaza Strip.

**Methods**

**Design, setting and sampling**

Data were collected in a healthcare centre providing sexual and reproductive health (SRH) services to women in the Gaza-Strip. In total, 21 women were recruited into three focus groups by purposeful sampling targeting women who were 18 years or older and had experienced unintended pregnancies.

Focus groups were conducted, with participating women and a female researcher as facilitator. Each focus group consisted of 5-12 participants. After explanation of the purpose of the study and obtaining a written consent from each participant, structured questions were asked and answers were invited from participants (see supplementary data file S1). The sessions were audio-recorded and later transcribed into verbatim including each individual question and all
answers. An agreement of complete confidentiality of all discussions was made prior to the start of the session and participants’ contributions were kept anonymous.

**Ethical Considerations**

Ethical approval for this study was obtained from the Human Resources Department of the Palestinian Ministry of Health (MoH), which is the body in Gaza to issue ethical and administrative approvals for studies involving humans. Further approval to conduct the study was obtained from the administrative body of the healthcare centre, where data collection was conducted.

**Data analysis**

Data were analysed through careful reading of the responses by each researcher followed by identifying, coding and categorizing of data and using thematic analysis, to process the qualitative information.[13] Throughout data coding, the research team extracted themes and gave an appropriate label for each. Some quotes from the participants are presented to provide a comprehensive idea about these themes.

**Patient and Public Involvement**

No patient or public involvement was sought when designing this study. However, the process of data collection was strongly influenced by participants, as their contributions dictated the themes of this paper.

**Results**

**Characteristics of participants**

The mean age of participants was 34.2±6.0 years and their parity was 2.7±6 with 28.6% (n=6) having completed university, and 47.6% (n=10) secondary school. Average household income was poor but the range reported by women was wide (table 1). Five main themes were identified.
Table 1: Sociodemographic characteristics of participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean ± Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>30.8 ± 7.5</td>
<td>24</td>
<td>45</td>
</tr>
<tr>
<td>Parity</td>
<td>2.7 ± 1.6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Income (in American Dollars)</td>
<td>$ 304.5 ± $ 257.5</td>
<td>0</td>
<td>$ 725.3</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No education</td>
<td>1</td>
<td></td>
<td>4.8%</td>
</tr>
<tr>
<td>Primary school level</td>
<td>3</td>
<td>14.2%</td>
<td></td>
</tr>
<tr>
<td>Preparatory school level</td>
<td>1</td>
<td>4.8%</td>
<td></td>
</tr>
<tr>
<td>Secondary school level</td>
<td>10</td>
<td>47.6%</td>
<td></td>
</tr>
<tr>
<td>University degree</td>
<td>6</td>
<td>28.6%</td>
<td></td>
</tr>
</tbody>
</table>

Economic hardship

Most participants reported financial difficulties with unemployment and lack of opportunities. This ranged from no regular family income and dependence on food handouts to small incomes that barely covered a family’s needs and was a major reason for pregnancies to be unwanted; the only reason for some, as one woman reported: ‘I have two boys and four girls. This is enough for us as we live in a small house for rent.’ For many, it was difficult to cope with increasing numbers of children. With husbands being unemployed, many participants felt that care for the family fell to them entirely, which was expressed by one woman: ‘He leaves the house and the children are left with me.’

High pressure on women for more male babies was often combined with gender based violence

A large number of women related that, although they did not want to have further pregnancies, their husbands wanted more boys. This led to distress, described by one as follows: ‘I had a Caesarean section and did not want to get pregnant quickly again. I was afraid and wanted to terminate the pregnancy.’ The wish for more boys by husbands and their families also resulted in fears among participants of having female babies. Threats or even violence towards them or
towards their children was reported by many participants. Common perpetrators were the husbands, but two also described involvement of mothers-in-law. One woman narrated her experience as follows: ‘I have a boy and two daughters. My mother-in-law told me that if I bring another girl, they will throw her down the stairs.’ Another one said: ‘Thanks to God, I had twin boys. I wanted to get rid of them. I threw myself down (to induce abortion). I was scared they would be girls. My husband and his mother hit me and threatened me if they were girls.’

**Advanced maternal age perceived as social stigma**

Women who were over 40 years old, felt they were too old for another pregnancy. They feared a social stigma attached to becoming pregnant over the age of 40 years. One said: ‘I was 45 years old and already have five children. I saw the doctor, but he did not give me the tablet to help me miscarry. I took the vaginal tablet at home myself and miscarried” Another one explained: ‘I was 40 years old. I miscarried. I was pregnant, but did not want to be. I was scared people would blame me.’ Many participants agreed that pregnancies in older women would lead to children with health problems and were not desired. Interestingly, their attitudes not only illustrated, but also supported the social stigma attached to pregnancies in older women.

**Lack of support for women facing unintended pregnancies led to self-induced attempts at termination of pregnancy**

A shared experience by all participants was lack of support and not knowing where to access help in their situation. Healthcare professionals in antenatal clinics were described as unsympathetic by many and described as follows: ‘When I went to the antenatal clinic, the nurse told me that I should not have got pregnant and she blamed me for being pregnant.’ A significant number of women (71.4%; n=15) reported trying to terminate their pregnancies by using oral and even vaginal prostaglandins without medical supervision. In some cases, they described to resort to unsafe methods such as jumping from heights or herbal mixtures. Termination of pregnancy is illegal in the Gaza Strip, unless the mother’s health is at risk by the pregnancy, which led to a feeling of isolation among women.
Incorrect use of contraception was the most common reason for contraceptive failure

Serious health conditions or side effects associated with contraceptive use, which required a change in contraception, was the most common reason leading to contraceptive failure and incorrect use of contraception. Different participants described these factors as follows:

‘My health condition does not allow me to use most of the methods of contraception. We used condoms, but I got pregnant’

‘The physician changed the pills to a different type with two colors. After I got pregnant he told me that I made a mistake and started with the wrong pill’

Discussion

This study demonstrates the need for a service for women facing unintended pregnancies. Such a service is only available at one healthcare centre in the Gaza Strip. A wide variation of reasons for the pregnancies to be unwanted was given from financial and social difficulties to advanced maternal age. The factors that actually caused the unintended pregnancies were more uniform and included incorrect use or change of contraceptive methods. A surprisingly large number of women sought, or even attempted, to terminate the pregnancy without medical supervision.

Determining prevalence of unintended pregnancy can be difficult, firstly, due to the fact that not all affected women will admit to a pregnancy being unintended and, secondly, because pregnancy intention changes over time. Many studies were conducted using retrospective data collection once the pregnancy had occurred, when women might be hesitant to label their pregnancy as ‘unintended’ or ‘unwanted’. [14] So far, no reliable numbers are known about the prevalence in the Gaza Strip. Despite the obvious neglect of this topic, the current study confirmed a significant number of unintended pregnancies also in the Gaza Strip. However, sociodemographic determinants of unintended pregnancies were not the same as in other studies, where poor educational achievements were a commonly reported determinant. [5 6 14-16] In contrast, 76.2% of women had benefitted from secondary level education in this study. One reason for this could be the generally high level of education of girls in the Gaza Strip.
Another, more significant, reason might be that this study only included women who actually sought sexual and reproductive health advice and more women with poorer educational achievements would not seek such advice and might have higher numbers of unintended pregnancies. Further, less pronounced, discrepancies were that of parity and age. When other studies reported higher parity and higher age to be a determinant for unintended pregnancies, mean parity and age were not extraordinarily high in this study.[6 15 16]

A deeper exploration of reasons for unintended pregnancies in this study showed a large variation with the most common reason given to be financial difficulties. This is in concordance with other studies that found a significantly higher prevalence of unintended pregnancies in low income countries when compared to high income countries.[6 15 17 18] In addition to this, the Gaza Strip, being an area of conflict and insecurity with poor economic prospects and high unemployment rates, might influence this decision among women and fertility rates are constantly decreasing.[19]

One notable aspect was the pressure that women felt to be under to produce more male babies, some suffering verbal or even physical violence.[5 20] So far, Gender based violence (GBV) has been poorly addressed in the Gaza Strip and a recent report by the United Nations Population Fund (UNFPA) showed that reporting of GBV was only at estimated 54% in the Gaza Strip and largely supported by non-governmental organizations.[20] However, the same report also pointed at a recent increase in momentum to address GBV on different levels such as policy making and capacity building. The current study confirms this to be an urgent need for women in the Gaza Strip. Public life and many institutions remain dominated by men and do frequently not reflect women’s concerns and challenges adequately, as shown by this study, where the distressing experiences of many women facing unintended pregnancies were completely neglected and not reflected in current provision of sexual and reproductive health services.
Surprisingly, a large number of participants admitted to trying to terminate the pregnancy without medical supervision. Termination of pregnancy is illegal and contradicts with religious values prevailing in the Gaza-Strip, unless the mother’s health is at risk. The WHO categorization of termination of pregnancy includes ‘safe abortions’, which are safe methods performed by trained practitioners, ‘less safe’ which include safe methods performed by untrained practitioners and ‘unsafe’ which are dangerous procedures.[21] In this study, 28.6% of participants reported to have attempted termination of their pregnancies without medical supervision. This is not an exact number, as disclosure by participants was not prompted. Most attempts at termination of pregnancy fell into the ‘less safe’ category and only two were reported in the ‘unsafe’ category. A study conducted among Irish women, accessing termination of pregnancy abroad, also found that unsafe methods had been considered, although not attempted.[22] Nevertheless, ‘less safe’ can also lead to serious complications such as haemorrhage or infection.[21 23] posing a threat to women’s lives, especially as exact gestational age is often not established.

The most effective way to reduce the incidence of ‘less safe’ and ‘unsafe abortions’ is to reduce the incidence of unintended pregnancies.[5 23] On one hand, this includes the provision of easy to access and free contraceptive services available to all women.[4] In the Gaza-Strip, this is possible for women at healthcare centres run by the United Relief and Works Agency (UNRWA) or the government. However, not all methods are available to women at all times.[24 25] Sudden unavailability of a used method can make it necessary for women to swap to a different method, which has been one of the main factors identified in this study to lead to unintended pregnancies. The supply of contraception to the Gaza Strip is not constant, but recurring shortages of some methods are common, demonstrating the need for greater availability and choice of long-acting reversible contraception (LARC). However, the UNFPA, the sole provider of contraception to Palestine, has made budget cuts in June 2017, reducing these supplies to Gaza, potentially causing more shortages.[26] The impact of this on prevalence of unintended pregnancy has yet to be studied.
In Gaza, the most common contraceptive choices among women are combined oral contraceptive pills (COCP) followed by condoms and only thereafter by the intrauterine contraceptive device or medroxyprogesterone injection, which are the LARC methods available in Gaza.[20, 25] The hormonal implant is not freely available to women, but only a few centres offer this at a cost, which often precludes its use for women. This shows that, although the use of modern contraceptives has been reported to have increased in Gaza, there is still a need for improvement, especially in making a choice of LARC widely available.[27] Furthermore, such efforts need to be complemented by services that address unintended pregnancies openly and provide support for women facing them.[22] This study demonstrates the potential of such interventions to reduce negative health impacts on women as a result of unintended pregnancies.

The strengths of this study include the setting, which allowed women to speak freely and disclose issues, that might have not come to light in a questionnaire survey or different setting. Limitations are the small sample size and the fact that only women already accessing SRH services could be reached by this study.

**Conclusion**

Although the exact prevalence of unintended pregnancies in the Gaza-Strip is not known, they are common and cause anxiety and distress to women, leading some women to attempt ‘less safe’ and even ‘unsafe’ methods to terminate their pregnancies. The most effective way of preventing unintended pregnancies remains access to reliable contraception. However, a service designated to support women facing unintended pregnancies is needed in the Gaza Strip. Local policy makers and healthcare professionals have to address this issue openly when planning healthcare services.

**References**


13. Byrne M. Data analysis strategies for qualitative research. AORN Journal 2001;73(3):401-03


27. Madi H. Contraceptive use by Palestinian-refugee mothers of children aged 0–3 years attending the UN Relief and Works Agency for Palestine Refugees in the Near East’s maternal and child health clinics in the occupied Palestinian territory (West Bank and Gaza Strip), Lebanon, Jordan, and Syria: a follow-up study. The Lancet 2012;380(Supplement 1):S11

**Declarations**

**Funding**

No funding was received for this study.

**Ethical Approval and Consent**

No Institutional Review Boards (IRB) exist in the Gaza Strip. Ethical approval for this study was obtained from the Human Resources Department of the Palestinian Ministry of Health (MoH), which is the body in Gaza to issue ethical and administrative approvals for studies involving humans. Further approval to conduct the study was obtained from the administrative body of the Women’s Centre where data collection was conducted. Formal written consent was obtained from all potential participants prior to taking part in this study. The purpose of the study was explained to all participants as well as the fact that taking part in this study was completely voluntary and had no effect on the medical care they received. Complete confidentiality was agreed and kept, as well as anonymity secured in transcription of data.

**Conflict of Interest**

All authors declare no conflict of interest.