Concealed Pregnancy: Prevalence, Perinatal Measures and Socio-Demographics

Abstract:

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A target group of women who concealed their pregnancy (n=43) was compared to an aged-matched control group (n=30) that experienced a crisis pregnancy. Comparisons were also made with a larger dataset (n=6363) of births in University Hospital Galway (UHG) (normative group). Data was analysed using the Chi-square test and the Kolmogorov-Smirnoff two-sample test. The number of women from the target group that were from a rural background was 29 (65%), compared to 10 (33%) from the control group. The number of women from the target group that feared a negative parental reaction to the pregnancy was 34 (79%), compared to 12 (40%) from the control group. The birth weight in the target group was 400g lower than the normative birth weight. The average age of women who concealed was 8 years lower than the normative age. The prevalence of concealed pregnancy in UHG was one in every 148 births.

Methods

A retrospective case control study was carried out from January 1st 2003 to December 31st 2004. All participants to be included in the study had been referred to the social work department in University Hospital Galway (UHG). The criteria for inclusion in the target group defined a concealed pregnancy as a woman who presents for antenatal care past 20 weeks gestation not having disclosed her pregnancy to her social network. The control group (n=30) were selected based on age matching criteria, from all crisis pregnancies, which had been referred to the social worker department. The definition of a crisis pregnancy used is as defined by the Crisis Pregnancy Agency as a pregnancy which is neither planned nor desired by the woman concerned and which represents a personal crisis for her. Reported risks to an infant who does not receive antenatal care are, prenatally lowered birth weight, an increased likelihood of being admitted to a neonatal unit and a higher peri-natal mortality rate than control groups. Obstetric literature in this area highlights that a better understanding as to why women postpone or desist antenatal care is important for the health and well being of the baby and mother involved. Concealment of pregnancy has been noted to be one of the reasons why a pregnancy remains un-booked. Antenatal care is often foregone or delayed in a concealed pregnancy and concealed pregnancy has been linked with infanticide and thus the exploration of this phenomenon was considered to have clinical significance and relevance.

Results

Twenty-five (58%) of the women in the target group only disclosed to their family and social network post delivery while thirteen (30%) of the target group were also un-booked. None of the deliveries in the control group were un-booked and all had disclosed their pregnancies prior to 20 weeks gestation. A summary of the findings are given in Table 1. The mean weight of infants in the target group was not found to be significantly lower than those infants in the normative group. D =0.19, P<0.001 (Figure 1).

No significant difference was found between the groups in relation to education levels or employment status. The majority of the target group (n=37; 86%) and the control group (n=25; 83%) had attained secondary education. Thirty women (70%) who concealed their pregnancy were either employed or in full time education while 15 (50%) of the control group were in employment or education. Of the women who concealed their pregnancy, 28 (65%) were from a rural background.

Figure 1

The mean age of the women in the target group was 22.9 years (SD =4.8). The age range of women in the target group was similar to the age range in the normative group. However the modal age is lower in the target group than the normative group. (Figure 2). A significant difference was found between the ages of the women in these two groups d=0.56, p<0.001. The number of teen pregnancies in the target group was low which highlights that concealed pregnancy is not a phenomenon exclusive to teenagers but women of all ages. There were 7 (16%) admissions to the neonatal unit in the target group compared to 1 (3%) in the control group. This difference was not significant. A chi-square test also yielded no significance difference between the target and control group in relation to the number of previous pregnancies. The Kolmogorov-Smirnoff two-sample test was applied. An alpha level of .05 was used for all statistical tests. For ordinal data, the Kolmogorov Smirnoff two-sample test was applied.
Concealed Pregnancy: Prevalence, Perinatal Measures and Socio-Demographics

The prevalence rate of concealed pregnancies reported in this study was 1 in every 148 births. This rate is higher than that reported in a Dublin based study (1 in 768 births) carried out in the Rotunda maternity hospital (1 in 403 births). University Hospital Galway (UHG) serves both a city and rural population and this may explain some of the differences in prevalence rates reported in these three Irish hospital based studies. The risk to infants who receive inadequate antenatal care of lower birth weight was also shown in this study. Some researchers argue that immaturity and inexperience explain a concealed pregnancy yet seven of the women had previously concealed a pregnancy. This findings points towards repetitive behaviour that may be better explained as an individuals coping style as opposed to naivety. Qualitative data from this current study highlighted that unsupportive familial and societal systems influenced some women’s decision to conceal a pregnancy. In some of the cases of reoccurring concealed pregnancies the same unsupportive systems may have contributed significantly to the second concealed pregnancy.

Teenagers were not overly represented in either the concealed pregnancy group or the crisis pregnancy group. This finding supports the contention that concealed pregnancy is not exclusively a teenage phenomenon. Therefore, the proposal from a New Zealand based study, which reported that teenaged girls comprised the majority of cases of concealed pregnancy, was not supported in this Irish sample. The majority of women in the target group were either in third level education or employed at the time of their pregnancy. These finding are contrary to a previous study, which investigated an American sample in which the majority of women who concealed a pregnancy were unemployed and had low levels of education.

Fear of parental response has been cited as an explanation as to why women conceal a pregnancy. In this study the intention to place their child for adoption was given as one of the reasons why a pregnancy was concealed and several children from the concealed pregnancies were placed for pre-adoptive fostering post delivery.

This study found that the prevalence of concealed pregnancies was higher in UHG than in previous studies in Irish maternity hospitals, which highlights that concealed pregnancies are relatively common. Risks to the infant cited in cases of un-booked and denied pregnancy such as lower birth weight were also echoed. It was found that concealed pregnancy occurs across a wide age range but that it is most common in women in their early twenties. Women who concealed their pregnancy were predominately single and tended to be educated and in employment or an educational setting. Having a rural background was found to be a significant factor as to whether someone concealed their pregnancy and perceived family reaction was also found to be a significant factor contributing to the process of concealment. Additionally, the reoccurrence of concealment is also an important finding and suggests that if a woman conceals a pregnancy on one occasion she may be more at risk of concealing future pregnancies. These finding have clinical implications for the practitioners working with this population. Further international research may help clarify prevalence rates and which specifically cultural nuances play a part in explaining the occurrence of concealed pregnancy.

References


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Figure 1: Conception and Gender

Figure 2: Original Family Background

Figure 3: Original Family Background

Discussion

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