Screening and brief intervention for intimate partner violence among antenatal care attendees at primary healthcare clinics in Mpumalanga Province, South Africa

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Background. It has been found that pregnant women experience a higher rate of intimate partner violence (IPV) than women who are not pregnant. This paper presents findings of a brief IPV intervention provided to pregnant women attending prevention of mother-to-child transmission of HIV services.

Methods. Eighteen community workers were recruited and trained in assessment of and intervention for abuse during pregnancy. These were implemented for 10 months at 16 primary healthcare facilities in the Thembisile sub-district, Nkangala district, Mpumalanga Province, South Africa.

Results. A total of 2 230 pregnant women were screened for abuse; 7.2% (160) screened positive and received a brief intervention. This was a 20-minute session on safety behaviours and strategies for dealing with the abuse, including referral to local support services. Eighty-four women attended a follow-up interview 3 months after the intervention. The mean danger assessment score of 6.0 before intervention fell significantly to 2.8 after 3 months.

Conclusion. The brief intervention provided to these women contributed to a significant reduction in the level of IPV.

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Intimate partner violence (IPV), defined as actual or threatened physical, sexual, psychological or emotional abuse by current or former partners, is a global public health concern[1] with negative physical and mental health consequences. The adverse effects of IPV have been reported to include mental disorders such as suicidal ideation, suicide and post-traumatic stress disorders; gynaecological and obstetric disorders such as chronic pelvic pain and preterm deliveries; and infectious diseases such as HIV infection and other sexually transmitted infections (STIs).[2-5] South Africa has one of the highest rates of violence against women in the world, with over 55 000 cases of rape reported to police in 2006.[6] Studies have shown that IPV is the most common form of violence against women worldwide.[7-9] There is also evidence that women who experience sexual assault in South Africa,[10-15] like women in other parts of the world,[16-18] are at an increased risk of HIV/AIDS.

The World Health Organization[19] recommends screening and referral for women who are at risk of or have experienced violence in the context of prevention of mother-to-child transmission (PMTCT) of HIV, and provision of comprehensive management and support for victims of gender-based violence. Ntaganira *et al.*[1] suggest that counselling should be offered to women when testing for HIV, and that they should also be screened for IPV. Screening for IPV by lay counsellors in the course of voluntary HIV testing and counselling (VCT) has been shown to be acceptable to women in South Africa.[20] Christofides and Jewkes[20] found that women supported being asked about their experiences of IPV during VCT services. Routine screening facilitates identification of women experiencing IPV, and may reduce the severity and frequency of violence.[21]

Maman *et al.*[22] support training of HIV counsellors to ask questions about partner violence during counselling sessions. Counsellors have an important role to play in helping clients develop safe disclosure plans, including finding out about the role violence plays in their lives. Counsellors therefore need to be trained in how to ask sensitive questions about violence and use this information to encourage but not force clients to disclose. Such training should be an integral part of high-quality VCT services. In addition, counsellors should be aware of existing community-based programmes that support women living in violent relationships, so that they can make appropriate referrals when necessary.

The aim of this study was to assess the effectiveness of screening for IPV and a brief intervention in a sample of pregnant women who reported partner violence in the Thembisile sub-district, Nkangala district, Mpumalanga Province, South Africa.

Methods

Design

The study used a pre/post-intervention design. The intervention was implemented from December 2010 to September 2011 at 16 primary healthcare facilities in Thembisile sub-district.

Procedure

Pregnant women aged 18 years and older who presented at primary healthcare clinics were screened for abuse at HIV post-test counselling. Those who screened positive were given a 20-minute intervention session on IPV. A screening form (Fig. 1) was used to determine abuse history, and a danger assessment form was used as part of the brief intervention to assess the extent of danger experienced by the women who screened positive for abuse. A follow-up interview was done 3 months after the intervention, at which point another danger assessment form was completed. The study was approved by the Human Sciences Research Council Ethics Committee (Protocol REC 4/05/02/10).

1. Within the last 12 months, have you been pushed, shoved, hit, kicked or otherwise physically hurt by someone? Yes________ No________
If YES, by whom_______________
Total number of times_________

2. Since you have been pregnant, have you been hit, slapped, kicked, or otherwise physically hurt by someone?
If YES, by whom_______________
Total number of times_________

3. During the last 12 months, have you been forced into sexual activities by someone? Yes______ No_______
If YES, by whom_______________

Fig. 1. Abuse screening form.

Recruitment, training and the intervention

Eighteen community workers were recruited and trained in a protocol of assessment and intervention for abuse during pregnancy. The intervention was adapted from the March of Dimes protocol for prevention and intervention[23] and consisted of a 20-minute session that included:

Supportive care. The community worker serves as an available, interested and empathic listener. Women are encouraged to discuss the violence they experience, their life situations, and issues they face.

Anticipatory guidance. Women are told what to expect if they decide to access legal aid, law enforcement, shelter or counselling services, as well as the risks associated with leaving the abuser, having the abuser arrested, or applying for a protection order.

Guided referrals. The community worker offers referrals tailored to the individual woman's needs (e.g. legal aid, shelter, counselling services, etc.).

This intervention is based on Dutton's empowerment model,[24] which includes protection, a focus on increasing the woman's safety, and enhanced choice making and problem solving in decisions about the relationship, such as relocation.

Measures

The Danger Assessment Scale was used to collect information from the women. It is a 20-item questionnaire with a yes/no response format, designed to help women determine their potential risk of becoming a victim of femicide.[25] All items refer to risk factors that have been associated with murder in situations involving abuse. Examples of risk factors include the abuser's possession of a gun and use of drugs, and threats of suicide by the abuser. The possible range of scores is 0 - 15. For this study, women were asked if the risk factors had occurred within the past 90 days. The Cronbach's alpha reliability coefficient of the Danger Assessment Scale for this study was 0.69 at baseline and 0.61 at follow-up assessment.

Data analysis

Data were captured and analysed using Microsoft Excel and SPSS version 19.0. A descriptive analysis was done to determine the characteristics of the sample, while paired-sample *t*-test analysis was used to determine the difference between the sample means at baseline (pre-intervention) and at follow-up (post-intervention).

Results

A total of 2 230 pregnant women at 16 primary healthcare clinics were screened for abuse, and 7.2% (160) screened positive. The pre-intervention data (Table 1) indicated that almost 43% of the abused women reported that the physical violence they experienced had increased in severity or frequency over the past 3 months. About 21% reported that their partner had forced them to have sex when they did not wish to do so, and more than half (51.6%) reported having been beaten by their partner in the past 3 months (while pregnant).

Only 84 of the 160 clients who screened positive could be followed up (retention rate 52.5%). Attrition analysis found that there were no differences in terms of Danger Assessment Scale scores between those who did and did not drop out of the study (t=0.09; p=0.927).

Post-intervention data indicated that almost 9% of the abused women reported that the physical violence had increased in severity or frequency over the past 3 months, about 7% reported that their partner forced them to have sex when they did not wish to do so, and just over 24% reported having been beaten by their partner.

Table 2 shows the results of the paired-sample *t*-test analysis comparing the pre- and post-intervention Danger Assessment Score means. The pre-intervention mean score (6.0) was higher than the post-intervention mean score (2.8). Table 3 shows the paired differences, indicating a significant difference between the two means (t=8.24; d=83; p<0.001).

Discussion

In this study, 7.2% of the 2 230 pregnant women who were screened for IPV reported abuse by their partners. This proportion is much lower than that reported by Phaswana-Mafuya *et al.*,[11] who found that about 14% of pregnant women in Mpumalanga Province in South Africa reported experiencing partner violence in the past 12 months. While this proportion is also much lower than that among women attending antenatal clinics in Soweto (55.5%),[14] it is similar

Table 1. Abuse reports at pre- and post-intervention assessments*

Abuse items	Pre-intervention Yes, *n* (%)	Pre-intervention No, *n* (%)	Post-intervention Yes, *n* (%)	Post-intervention No, *n* (%)
1. Has the physical violence increased in severity or frequency over the past 3 months?	68 (42.5)	92 (57.5)	7 (8.3)	77 (91.7)
2. Does he own a gun?	14 (8.8)	145 (91.2)	1 (1.3)	79 (98.8)
3. Have you left him after living together during the past 3 months?	39 (30.2)	90 (69.8)	6 (10.9)	49 (89.1)
4. Is he unemployed?	48 (30.4)	110 (69.6)	12 (17.9)	55 (82.1)
5. Has he ever used a weapon against you or threatened you with a lethal weapon in the past 3 months?	20 (12.8)	136 (87.2)	2 (3.1)	63 (96.9)
6. Has he threatened to kill you in the past 3 months?	37 (23.3)	122 (76.7)	4 (6.0)	63 (94.0)
7. Has he avoided being arrested for domestic violence in the past 3 months?	23 (14.7)	133 (85.3)	3 (4.5)	64 (95.5)
8. Do you have a child that is not his?	68 (43.3)	89 (56.7)	22 (33.8)	43 (66.2)
9. Has he ever forced you to have sex when you did not wish to do so in the past 3 months?	33 (20.8)	126 (79.2)	5 (7.3)	76 (92.7)
10. Does he ever try to choke you?	36 (22.6)	123 (77.4)	13 (19.4)	54 (80.6)
11. Has he used use illegal drugs (such as 'dagga' or street drugs such as amphetamines, 'tik', cocaine, 'crack') in the past 3 months?	31 (19.6)	127 (80.4)	15 (22.4)	52 (77.6)
12. Is he an alcoholic or a problem drinker?	106 (67.9)	50 (32.1)	34 (50.7)	33 (49.3)
13. Has he controlled most or all of your daily activities in the past 3 months? (For instance, does he tell you who you can be friends with, when you can see your family, how much money you can use, or when you can take the car?)	101 (63.9)	57 (36.1)	30 (46.9)	34 (53.1)
14. Is he violently and constantly jealous of you? (For instance, does he say 'If I can't have you, no one can.')	130 (81.8)	29 (18.2)	45 (68.2)	21 (31.8)
15. Have you been beaten by him while you were pregnant in the past 3 months?	82 (51.6)	77 (48.4)	20 (24.1)	63 (75.9)
16. Has he threatened or tried to commit suicide in the past 3 months?	8 (5.1)	150 (94.9)	2 (3.1)	63 (96.9)
17. Does he threaten to harm your children?	6 (3.9)	147 (96.1)	1 (1.6)	60 (98.4)
18. Do you believe he is capable of killing you?	48 (30.8)	108 (69.2)	8 (12.1)	58 (87.9)
19. Does he follow or spy on you, leave threatening notes or messages on the answering machine, destroy your property, or call you when you don't want him to?	58 (36.7)	100 (63.3)	4 (6.1)	62 (93.9)
20. Have you ever threatened or tried to commit suicide in the past 3 months?	14 (8.8)	145 (91.2)	1 (1.5)	65 (98.5)

*Owing to missing values, not all frequencies add up to the total.

Table 2. Mean danger assessment pre- and post-intervention

Violence items	Mean difference	Total sample	SD	SE
Danger assessment total score (pre-intervention)	6.02	84	2.97	0.32
Danger assessment total score (post-intervention)	2.82	84	2.47	0.27

SD = standard deviation; SE = standard error of the mean.

Table 3. Mean differences in danger assessment pre- and post-intervention

Violence items	Mean difference	Total sample	SD	SE	95% CI of the difference	*t*	df	*p*-value
Danger assessment scores, pre- & post-intervention	3.20	84	3.56	0.39	2.43 - 3.98	8.24	83	<0.001

SD = standard deviation; SE = standard error of the mean; CI = confidence interval; df = degrees of freedom.

to that in a review of studies in USA,[4] where about 4 - 8% of all pregnant women were reported to be victims of partner violence.[23] Compared with the baseline data, the follow-up figures 3 months later showed a 34% decrease in reported severity and frequency of physical violence, a 13.5% decrease in sexual abuse and a 27.5% decrease in physical abuse. Overall, the pre-intervention mean danger assessment of 6.0 fell significantly to 2.8 after 3 months. These findings indicate that an intervention to reduce IPV offered to a sample of pregnant women in Nkangala district with experience of partner violence in the previous 3 months made a significant contribution to reducing violence.

We attribute the low retention rate for follow-up interviews (52.5%) to lack of adequate contact details for tracing the clients. It is also possible that some clients were unwilling to be contacted. The intervention may have made them feel uncomfortable because it

brought back memories of the abuse, or they could have been in denial about being abused.

Study limitations

Study limitations include only self-reported data on episodes of IPV, and lack of a control group. In addition, the low retention rate may compromise the findings. However, attrition analysis did not find any differences in IPV between the women who dropped out of the study and those who did not.

Conclusion

The relatively high rate of IPV reported by pregnant women in this study needs to be reduced. The brief intervention provided led to a significant reduction in the level of IPV.

Screening for IPV during pregnancy is essential and needs to be integrated into PMTCT services in an effort to reduce and prevent partner violence. The 20-minute intervention adopted from the March of Dimes protocol can be used as an effective abuse-prevention strategy among pregnant women presenting at PMTCT services in South Africa.

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