Domestic Violence and Postpartum Depression

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ABSTRACT
Introduction: Domestic violence occurs at all levels of society. Evidence shows that sexual, physical and psychological violence are predisposing factors of postpartum depression. This study was aimed to determine the relationship between domestic violence and postpartum depression.

Methods: This research adopted quantitative method through observational with a cross-sectional study design by analyzing secondary data from SEHATI longitudinal surveillance. A total of 232 women was selected as sample using a purposive sampling method, with the sample criterion being mothers with children <2 years old located in Purworejo District, Central Java, consisting of 16 sub-districts and 494 villages. The data obtained were analyzed using the chi square statistical test and binomial regression test.

Results: The results of the quantitative data showed that physical violence against postpartum depression (PR = 1.7; 95% CI = 1.23-2.38), psychic violence against postpartum depression (PR = 1.9; 95% CI = 1.44-2.54), and sexual violence against postpartum depression (PR = 2.9; 95% CI = 1.54-2.65). The result of the qualitative data showed that postpartum depression occurred due to domestic violence.

Conclusion: Physical, psychological and sexual violence in the household are significantly related to postpartum depression.

INTRODUCTION
Domestic violence is the most common form of violence experienced by women in Indonesia (Oram et al., 2017). The definition of domestic violence as stated in Law Number 23 of 2004 Article 1 is every action against another person, which results in physical, sexual, psychological, and domestic misery or neglect of the household related to activities to carry out, coerce or take away the law in the contribution of the household (Fekadu et al., 2018; Jewkes et al., 2019). The causes of domestic violence can be classified into internal factors and external factors. Internal factors involve the personality of the perpetrators of violence which makes the perpetrators easily commit acts of violence when faced with situations that cause anger or frustration. Aggressive personalities are usually formed through interaction in the family or with the social environment in childhood. If violence presents in the life of a family, chances are that the children will experience the same thing after they get married (Adams & Bewley, 2017). This is because they consider that violence is a natural thing or they are considered a failure if they do not repeat the pattern of violence. Suppressed feelings of resentment and anger toward parents, will eventually manifest as acts of violence against their wives, husbands or children (Al-Dahasha & Kulatunga, 2018).

Domestic violence occurs almost all over the world. The number of reported incidents of violence against women in Indonesia has tended to increase over the past 11 years (Boivin & Leclerc, 2016; Liu et al., 2018). In 2019, there were 431,471 cases of violence against women, an increase of 693% from 2008 in which there were only 54,425 cases. Cases of domestic violence (KDRT) in Central Java in 2019 reached 2,525 cases. This is the second largest number after West Java, reaching 2,738 cases (Kaser-Boyd & Kennedy, 2018). This figure presents a phenomenon of events that need to be considered
and resolved (Adibelli et al., 2019). Even though the amount of violence is quite large, in reality there are still women who experience violence and do not report (Boivin & Leclerc, 2016).

Battered mothers or conflicts with pregnant couples are among the causes of postpartum depression. Domestic abuse will have a negative impact, resulting in a mother’s disturbed mental health (Adams & Bewley, 2017; Michau et al., 2015). Also, postnatal depression can interfere with a child’s relationship with the mother if not treated properly and can cause problems in the family. For baby, postpartum depression results in emotional and behavioral disorders, such as crying and sleeping disorders, irritability to cry, and late communication, while untreated postpartum depression will increase the mother’s risk of chronic depression and other major depressive episodes (Ayers et al., 2016; Safadi et al., 2016). In addition, the effects of postpartum depression can cause interactions between mothers and the baby so that, while loving the baby, if upset with the baby then the baby may be pinch, and there are also mothers who do not want to associate her husband’s behavior with her baby (Fekadu et al., 2018). Based on the description above, this study was aimed to determine the relation of domestic violence to postpartum depression among women.

MATERIALS AND METHODS

This research adopted a quantitative method through observational with cross-sectional study design that analyzed secondary data from SEHATI longitudinal surveillance. Research was also conducted using qualitative methods through data collection and observing the processes that occur behind phenomena or events so as to obtain complex answers from respondents with in-depth interviews. The study population was all women at the time of the SEHATI survey and willing to be respondents, totaling 765 women. A total of 232 women was selected as sample using a purposive sampling method, with the sample criteria being mothers with children <2 years old located in Purworejo District, Central Java, consisting of 16 sub-districts and 494 villages.

Quantitative data were collected using the SEHATI questionnaire which was a modified questionnaire from the WHO Multi-Country Study on Women’s Health and Agents of Women’s Domestic Violence. The instrument used for screening for postpartum depression is Self-Reporting Questionnaire (SRQ) to show the possibility of depression. The results of the study were also strengthened by participant statements during the interviews as supporting data in accordance with the topic and objectives of the researcher. The data obtained were analyzed using the chi square statistical test and binomial regression test. This study received ethical approval from the Nursing Study Program, Faculty of Medicine, Universitas Gadjah Mada, Yogyakarta.

RESULTS

Researched Variable Relationship Analysis

The frequency distribution of respondents’ characteristics was based on age, education and pregnancy. The results of the research showed mothers’ age 25-35 years old were 185 people (79.74 percent), mothers’ age ≤ 19 years old and ≥ 36 years old were 47 people (20.26 percent). Respondents with educational background of graduating from high school and above were 57 people (24.57 percent), final education graduating from junior high school or below were 175 people (75.43 percent). Desired pregnancies were 178 people (76.72 percent) and unwanted pregnancies were 54 people (23.28 percent). Respondents who experienced physical violence from 232 respondents were 24 people (10.34 percent), those who did not experience physical violence were 208 people (89.66 percent). Those who experienced sexual violence were as many as 42 people (18.10 percent) and those who did not experience sexual violence were 190 people (81.90 percent). While 64 people experienced psychological violence (27.59 percent), 168 people did not experience psychological violence (72.41 percent) (Table 1).

The Relationship of the Variables Analysis

Physical violence was significantly related to postpartum depression (ρ = 0.009, PR = 1.7 95% CI = 1.23 - 2.38) and it can be interpreted that the postpartum depression prevalence in mothers who experience physical violence is 1.7 times greater compared to mothers who did not experience physical violence. Psychological violence is significantly related to postpartum depression (ρ = 0.000, PR = 1.9; 95% CI = 1.44 - 2.54) and it can be interpreted that postpartum depression prevalence in mothers who experience psychological violence is 1.9 times greater than in mothers who did not experience psychological violence. Sexual violence was significantly related to postpartum depression (ρ = 0.000, PR = 2.0; 95% CI = 1.54 - 2.65) and it can be interpreted that postpartum depression prevalence in mothers who experience sexual violence is 2.0 times greater than in mothers who did not experience sexual violence (Table 2).

The results of analysis of the relationship of respondents’ characteristics of age and education to postpartum depression showed a statistically insignificant relationship ρ > 0.05 and 95% CI included the number 1. The relationship of pregnancy to postpartum depression showed a statistically significant relationship ρ < 0.05 and 95% CI, excluding number 1 (ρ = 0.043, RP = 1.4; 95% CI = 1.03 - 1.91) and it can be interpreted that postpartum depression prevalence in mothers with unwanted pregnancies is 1.4 times greater compared to mothers with desired pregnancies (Table 3).

The analysis results of the age respondent characteristics, education and pregnancy are significantly not related to physical violence,
### Table 1. The Frequency Distribution of Respondents’ Characteristics (n = 232)

| The Characteristics of Research Subjects | Total |
|-----------------------------------------|-------|
|                                         | N     | %    |
| Age                                     |       |      |
| ≤ 19 years and ≥ 36 years               | 47    | 20.26 |
| 20 – 35 years                           | 185   | 79.74 |
| Education                               |       |      |
| Under Junior High School                | 175   | 75.43 |
| Above High School                       | 57    | 24.57 |
| Pregnancy                               |       |      |
| Unwanted Pregnancy                      | 54    | 23.28 |
| Desired Pregnancy                       | 178   | 76.72 |
| Physical Violence                       |       |      |
| Yes                                     | 24    | 10.34 |
| No                                      | 208   | 89.66 |
| Psychological Violence                  |       |      |
| Yes                                     | 64    | 27.59 |
| No                                      | 168   | 72.41 |
| Sexual Violence                         |       |      |
| Yes                                     | 42    | 18.10 |
| No                                      | 190   | 81.90 |
| Depression                              |       |      |
| Yes                                     | 97    | 41.81 |
| No                                      | 135   | 58.19 |

### Table 2. The Analysis Results of the Relationship of Domestic Violence with Postpartum Depression (n = 232)

| Variable             | Depression | X² | ρ  | PR  | CI (95%)       |
|----------------------|------------|----|----|-----|----------------|
| Domestic Violence    |            |    |    |     |                |
| Physical Violence    | Yes        | 16 (66.67) | 8 (33.33) | 6.80 | 0.009 | 1.7 | 1.23 – 2.38 |
|                      | No         | 81 (38.94) | 127 (61.06) |    |       |    |            |
| Psychological Violence| Yes      | 41 (64.06) | 23 (35.94) | 17.99 | 0.000 | 1.9 | 1.44 – 2.54 |
|                      | No        | 56 (33.33) | 112 (66.67) |    |       |    |            |
| Sexual Violence      | Yes        | 30 (71.43) | 12 (28.57) | 18.49 | 0.000 | 2.0 | 1.54 – 2.65 |
|                      | No        | 67 (35.26) | 123 (64.74) |    |       |    |            |

### Table 3. The Analysis Results of Respondents’ Characteristic of Age, Education, and Pregnancy with Postpartum Depression (n = 232)

| Variable             | Depression | X² | ρ  | PR  | CI (95%)       |
|----------------------|------------|----|----|-----|----------------|
| Age                  |            |    |    |     |                |
| ≤ 19 years and ≥ 36 years | 22 (46.81) | 25 (53.19) | 0.61 | 0.437 | 1.1 | 0.81 – 1.64 |
| 20 – 35 years        | 75 (40.54) | 110 (59.46) |    |       |    |            |
| Education            |            |    |    |     |                |
| Under Junior High School | 74 (42.49) | 101 (57.71) | 0.07 | 0.797 | 1.0 | 0.73 – 1.50 |
| Above High School    | 23 (40.35) | 34 (59.65) |    |       |    |            |
| Pregnancy            |            |    |    |     |                |
| Unwanted Pregnancy   | 29 (53.70) | 25 (46.30) | 4.09 | 0.043 | 1.4 | 1.03 – 1.91 |
| Desired Pregnancy    | 68 (38.20) | 110 (61.80) |    |       |    |            |
The analysis results show the relationships between age, education, and pregnancy were not statistically significantly related to sexual violence $\rho > 0.05$ (Table 5).

Table 4. The Analysis Results of the Relationship of Age, Education, and Pregnancy with Domestic Violence (Physical Violence) ($n = 232$)

| Variable                  | Physical Violence                       | X²     | $\rho$ |
|---------------------------|-----------------------------------------|--------|-------|
| Age                       |                                         |        |       |
| ≤ 19 years and ≥ 36 years | 7 (14.89)                               | 1.31   | 0.252 |
| 20 – 35 years             | 17 (9.19)                               |        |       |
| Education                 |                                         |        |       |
| Under Junior High School  | 20 (11.43)                              | 0.90   | 0.342 |
| Above High School         | 4 (7.02)                                |        |       |
| Pregnancy                 |                                         |        |       |
| Unwanted Pregnancy        | 8 (14.81)                               | 1.52   | 0.218 |
| Desired Pregnancy         | 16 (8.99)                               |        |       |

Table 5. The Analysis Results of the Relationship Between Age, Education, Pregnancy and Domestic Violence (Sexual Violence)

| Variable                  | Sexual Violence                      | X²     | $\rho$ |
|---------------------------|--------------------------------------|--------|-------|
| Age                       |                                       |        |       |
| ≤ 19 years and ≥ 36 years | 8 (17.02)                            | 0.05   | 0.829 |
| 20 – 35 years             | 34 (18.38)                           |        |       |
| Education                 |                                       |        |       |
| Under Junior High School  | 34 (19.43)                            | 0.84   | 0.358 |
| Above High School         | 8 (14.04)                            |        |       |
| Pregnancy                 |                                       |        |       |
| Unwanted Pregnancy        | 13 (24.07)                            | 1.69   | 0.193 |
| Desired Pregnancy         | 29 (16.29)                            |        |       |

Table 6. Binomial Regression Modeling of the Relationship of Physical, Sexual, Psychological and Variables of Age, Education and Pregnancy to Postpartum Depression

| Variable                  | Model 1 PR (95% CI)          | Model 2 PR (95% CI)          | Model 3 PR (95% CI)          |
|---------------------------|-------------------------------|-------------------------------|-------------------------------|
| Physical Violence         |                               |                               |                               |
| Yes                       | 1.2 (1.03 – 1.59)            | 1.0 (1.03 – 1.03)            | 1.0 (0.75 – 1.53)            |
| No                        |                               |                               |                               |
| Psychological Violence    |                               |                               |                               |
| Yes                       | 1.5 (1.13 – 2.20)            | 1.4 (1.06 – 2.07)            | 1.4 (1.04 – 2.14)            |
| No                        |                               |                               |                               |
| Sexual Violence           |                               |                               |                               |
| Yes                       | 1.5 (1.17 – 2.16)            | 1.7 (1.27 – 2.31)            | 1.5 (1.12 – 2.19)            |
| No                        |                               |                               |                               |
| Pregnancy                 |                               |                               |                               |
| Unwanted Pregnancy        | 1.3 (1.08 – 1.66)            | 1.2 (0.90 – 1.63)            |                               |
| Desired Pregnancy         |                               |                               |                               |
| Age                       |                               |                               |                               |
| ≤ 19 years and ≥ 36 years | 1.1                           |                               |                               |
| 20 – 35 years             |                               |                               |                               |
| Education                 |                               |                               |                               |
| Under Junior High School  | 0.9 (0.64 – 1.32)            |                               |                               |
| Above High School         |                               |                               |                               |
| Deviance                  | 340.27                        | 340.49                        | 349.19                       |
| R²                        | 0.03                          | 0.03                          | 0.03                          |
Multivariable Analysis
Multivariable analysis was performed to see the relationship between the independent variables and the dependent variable simultaneously by including significant external variables in the bivariate analysis. The modeling was conducted to see the variables that influence the dependent variable by looking at the amount of the contribution given by the independent variables and external variables. The statistical test used was a binomial regression with the confidence interval analysis of 95%.

The first model was built to see the relationship of independent variables (physical, psychological and sexual violence) to the dependent variable (postpartum depression). The analysis shows that there is a significant relationship between physical, psychological and sexual violence with postpartum depression. The first model contributes three percent to postpartum depression. The second model was built to see the relationship of physical, psychological and sexual violence to postpartum depression, and to see the magnitude of the contribution of external variables (pregnancy). Model 2 shows a significant relationship between physical violence against postpartum depression by controlling pregnancy variables (PR = 1.0; 95% CI = 1.03 - 1.03), psychological violence against postpartum depression by controlling pregnancy variables (PR = 1.4; 95% CI = 1.06 - 2.07) and sexual violence against postpartum depression by controlling for pregnancy variables (PR = 1.7; 95% CI = 1.27 - 2.31). The second model contributes three percent to postpartum depression. The third model was built to see the relationship of physical, psychological and sexual violence to postpartum depression, and to see the contribution of external variables. Model 3 shows a meaningful and statistically significant relationship between psychological and sexual violence against postpartum depression by controlling for external variables. The third model contributes three percent to postpartum depression (Table 6).

Violence against women in the form of physical, psychological and sexual violence still shows quite high numbers. Most are violence related to sexual crimes, many underage women have experienced it and it has caused deep trauma to victims (Boivin & Leclerc, 2016; Jung et al., 2019; Reed et al., 2016). The fear felt by the victim will make the incidence of depression and mental health disorders also increase. Counseling is very much needed to improve the psychological condition of the patient. In line with the research, the results show that the effects of sexual violence on children are very broad, encompassing physical, emotional and psychological conditions that can affect the development of children who are victims of sexual violence (Jewkes et al., 2019; Zhang et al., 2017). With various kinds of impacts that can arise, efforts are needed to anticipate the emergence of the impact of violence and treatment by the authorities. In addition to getting treatment from the authorities, professionals, in this case social workers, are also able to handle cases of sexual violence that occur to children (Semahgen & Mengistie, 2015).

Acts of violence are acts of crime; in general crime can arise due to the same conditions and processes, which results in social behavior. The social process can be seen from aspects of human life in society, namely, social mobility, competition and cultural conflict, political ideology, economy, quality of population, religion, income and employment. The social process that will influence a person to commit an act of violence can be analyzed as to the extent of its influence on a person with his violent actions. The limitations of the research obtained are the lack of exploration of information about the violence felt by someone, so it is necessary to do further and in-depth research.

CONCLUSION
Physical, psychological and sexual violence experienced by mothers from their husbands are
significantly related to postpartum depression. Age, education, and pregnancy factors are not confounding or interaction factors for postpartum depression in women with domestic violence.

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