

# **Case Report**

# Online Based Learning on Family Medicine Module for Medical Student: A Case Study on Postpartum Depression and Child Neglect

Myrna D. Savitri<sup>1</sup>, Naufal Najmuddin<sup>1</sup>, Azimatul Karimah<sup>2,3</sup>

- <sup>1</sup>Faculty of Medicine Universitas Airlangga, Surabaya, Indonesia
- <sup>2</sup>Dr. Soetomo General Hospital, Surabaya, Indonesia
- <sup>3</sup>Department of Psychiatry, Faculty of Medicine Universitas Airlangga, Surabaya, Indonesia



#### **ARTICLE INFO**

Received: August 30, 2021 Revised: October 7, 2021 Accepted: October 25, 2021 Published: November 30, 2022

\*) Corresponding Author: azimatul.karimah@fk.un-air.ac.id

**Keywords**: Family Medicine, Medical Student, Postpartum Depression, Child Neglect, Failure to Thrive

This is an open access article under the CC BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)



## **ABSTRACT**

Introduction: Family medicine is one branch of the medical field that provides holistic care to ailments in every age group. Medical students need to fully understand family medicine by using a holistic approach to an illness. Pandemic restrictions make movie watching an alternative to remote learning. Aims: This study aims to take cases from movies and asses the management of the patient using the family medicine approach. Methods: We herein report and study the case reviewed from a web series in which an infant was abandoned by her mother who suffers from postpartum depression. Conclusion: We highlight the accuracy of the portrayal of the disorder and also assess the steps taken by healthcare workers to treat the patient as a whole to determine the validity of using movies as a learning tool for the medical student.

#### INTRODUCTION

Family medicine is one scope of medicine that focuses on holistic healthcare for an individual and their family. Unlike other medical field that is limited to a particular body system, family medicine provides healthcare for each organ system and patients of all ages [1]. Hence, as future primary healthcare providers, medical students must understand the family medicine field. With the COVID-19 pandemic and its restrictions for medical students in Indonesia making them unable to attend in-person learning from real-life patients in the hospital, online learning is one of the preferred methods for medical students to still be able to remotely engage with patients while still being protected from infection exposure.

Online streaming service is one of the leading entertainment modes in this era, but they can also have some educational value as well. Many feature films, documentaries, and series depict real-life situations that can be used as a learning tool for students, especially medical students. Scenes from movies and series can be dissected and analyzed by students to better understand the realities of medical cases and patients beyond textbooks and hospitals [2]. Some movies and series are often themed around medicine or healthcare. With the use of cases reviewed from those movies, we can assess the management of patients using the approach of family medicine.

### **METHODS**

This is a case study taken by reviewing scenes depicted in the Netflix web series "Virgin River" Season 1 episodes 1 through 7. This series revolves around a family doctor practice in a fictional suburb of California. Each episode focuses on a different patient with illnesses ranging from pediatrics to palliative care. This study focuses on the case of a neglected 3 weeks old infant, Chloe (C), and her mother Lilly (L) who suffers from postpartum

depression, and also the actions done by the healthcare provider dr. Vernon Mullins (VM) and Melinda Monroe (MM), a local family physician and a certified nurse/midwife respectively.

#### **CASE PRESENTATION**

A 3-week-old infant was found abandoned in front of VVM'sfamily medicine practice. The nurse on duty, MM, then examined the infant and found that the 3 weeks old female baby was warm, clean, and seemingly in a healthy condition albeit a little underweight for their age. The baby's mother was nowhere to be found and a note accompanying the baby states that the baby was better off tended by better parents than she is. The whole town was searching for the baby's mother. MM suggested VM call child social services as per protocol but VM wanted to find the baby's mother by himself yesterday and didn't want to be held back by bureaucracies. During the search baby, C was not feeding well with a baby bottle and she grew fussier over time. MM has tried her hardest to help baby C drink more, but she still resists the bottle. With thinking about the best solution for the baby's welfare in mind, MM called social service after waiting for a whole day to give VM a chance. Suddenly baby C's mother was found, and a middle-aged lady named L. L was flustered and fled the scene she did not want to communicate with VM. But after much persuasion by MM, L finally was willing to cooperate.

L was living alone with no social support, and she was still devastated by the loss of her husband 6 months prior. She felt that as she got older and she had to take care of her late husband's farm alone, she couldn't provide for her baby and she felt like a bad mother. L did not want to bother her adult children who were living outside of her home and she did not want to seek help from other citizens of Virgin River. From the examination done by MM, we saw an anxious woman with bags under her eyes tear-stained pined face. Cogni-

tive functions were intact. She was in a depressed mood and affect. In the beginning, she refused to make eye contact and pleaded to be left alone, but MM talked about her experience dealing with the same thing, which was postpartum depression, and L eased up on her and began to cooperate. as coherent thought process but was preoccupied with her inability to provide care to her infant. She had some insight into her condition but still insisted on her guilt as a bad mother. Based on the available information, MM suspected L of having postpartum depression and advised her to do psychotherapy and got medications to overcome her symptoms.

#### DISCUSSION

The case presented in "Virgin River" shows a child abandonment caused by postpartum depression. According to the American Psychological Association (APA)[3], up to 1 in 7 women experience postpartum depression (PPD). Unlike baby blues syndrome, which is very common and normal in new mothers, PPD wouldn't resolve on its own and need proper treatment by trained personnel. Symptoms of PPD depicted in this case include depressive mood, feeling guilty and worthless, sadness, fear of not being a good mother, and disinterest in the baby which results in the abandonment of the three weeks old baby. These symptoms are consistent with the Diagnostic and Statistical Manual of Mental Disorders (DSM) 5th edition [4] diagnostic criteria of Major Depressive Disorder with the peripartum onset and also Pedoman Penggolongan Diagnosis Gangguan Jiwa di Indonesia 3rd edition's diagnostic criteria [5] of Gangguan mental dan perilaku yang berhubungan dengan masa nifas (Mental and behavioral disorders associated with postpartum).

Although PPD can arise in any female, risk factors [3,6]. can be divided into four main categories. Psychological risk factor comprises of history of depression and anxiety, refusal of the baby's gender, and

also sexual abuse trauma. Obstetric risk factors include high-risk pregnancy, operation and hospitalization during pregnancy, and having a baby with birth defects. Social factors cover isolation and lack of social support, domestic violence, and emotional stressors such as death or family problems. Another factor that should be considered is a lifestyle that consists of the sleep cycle, physical activities, and eating habits. In our patient's case, the death of her husband during her pregnancy and living in isolation from other family members which resulted in the lack of social support might be the cause of her PPD. Also, both tending the farm alone and the addition of certain obligations of a new mother were causing her to be exhausted both physically and mentally. The patient's personality to refuse help from family and friends to solve her problems alone is also a cause of her demise. Thankfully the patient was able to get help before her symptom evolves into postpartum psychosis [4], which might result in a greater danger both to herself and her baby.

The role of family medicine is very important in managing PPD, especially because several studies [7] have shown that screening for PPD was underreported mainly because of the time constraints in hospital settings. The family physician could do a routine postpartum home visit to assess the well-being of both the baby and its mother, and a good doctor-patient relationship must be established because women with PPD often hesitate to divulge their symptoms because the stigma surrounding motherhood that makes them feel guilty of not being a good mother. In our case, the step was taken by their healthcare provider, VM, and was correct. According to the Textbook of Family Medicine [1], a mother who has been identified with postpartum depression should be offered support, counseling, and a referral to a specialist. Both VM and MM tries to visit the patient's house to give counsel to the patient and after the patient agrees to be treated, she was referred to a specialist in the hospital. During her treatment, the patient decided to place temporary guardianship of her infant to her family member and this was a good solution to reduce the patient's burden giving her much-needed social support during her journey to recovery. In a study about intervention and management of postpartum depression [8], psychosocial support is the most influential on the reduction of depressive symptomatology hence in our case the patient was handled effectively.

In our case, the patient's PPD impaired her ability to care for her infant resulting in an underweight baby. Untreated PPD has been reported to have a negative outcome on child growth and development [9, 10]. Mothers who were depressed were notably more irritable, less engaged, and exhibit less emotion and warmth than normal mothers [11]. A study found that parents with depressive disorders were associated with fewer enrichment activities such as storytelling, singing lullabies, and playing games [12]. This would significantly make a negative impact on the offspring's cognitive, social, and emotional development. Problems found in infants and children with PPD mothers consist of a higher incidence of excessive crying, sleeping problems, and temperamental difficulties. Negative infant-mother interactions were also observed in mothers with PPD [13]. ranging from withdrawal from caring for their infant to hostility towards their offspring. In our case, the patient feels incompetent in caring for her baby. She thinks that because she was considered old, living alone, and already burdened to work on her farm by herself, she is a bad mother and she can't give the best care to her baby. The patient thought that by abandoning her baby in front of a doctor's office, her baby would have a higher chance of a livelihood. This symptom is consistent with the effect of PPD on children which is withdrawal from infant care. The patient baby was considered underweight among infants their age. A few

studies [14–16]. Postulate that women with PPD may be less likely to initiate breastfeeding. Both studies show that mothers with high postpartum depression scores are more likely to discontinue breastfeeding at 4 weeks and substitute milk with water or juice [17]. PPD mothers also reported having problems with breastfeeding and lower level of breastfeeding self-efficacy [16, 18]. This might be the reason for the weight problem in our case. With the busy errands to run on the farm, low energy, and loss of interest in infant caring, the baby might have been left unattended and malnourished. Efforts have been done by MM to try feeding the baby during the search for the baby's mother. A practical guideline made by the American Academy of Family Physicians (AAFP) [19]. stated that in the event of failure to thrive (FTT), a thorough history taking must be done to determine the root cause and risk factors contributing to it. Psychosocial issues including postpartum depression are listed as one of the risk factors for failure to thrive.

The primary goal of treatment for FTT from the scope of family medicine is to create an optimal growth velocity while supporting the family in the plan of care. Aside from treating the child, the guardian of the FTT should be counseled on the issue and how to manage well-balanced nutrition for the family [20]. A home nursing visit would be ideal, especially for families with problems providing good nutrition. They should be provided with social support and community resources. A follow-up visit to document the weight progress should be made and can be used as an opportunity to monitor both the children's and also the family's well-being [21]. In our case, MM performs weekly check-ins at the patient's house to make sure the baby is getting better in nursing and to monitor her weight changes. In the end, there has been a significant increase in the baby's weight and she is growing healthier. Hence the management of the FTT abandoned baby in our case has been done accordingly.

This case study shows that some films and television series provided a thorough and accurate depiction of real-life medical cases that can be used as a learning medium for medical students. However, this study also has its limitations. The information about the medical cases was scattered about and overwhelmed by the sheer amount of drama in the 45-minute episode, hence students must spend quite an abundant amount of time sitting through a few episodes' worth of content to be able to fully understand the full case from findings to the final case conclusion. Also, not every study has a subscription to online streaming services therefore this method of learning is not inclusive to all of the student body.

#### **CASE SUMMARY**

A 3-week-old infant was found abandoned by its mother. The baby is in poor nutrition and resisted feeding from a bottle. Investigation to find the mother leads to a middle-aged woman with postpartum depression from lack of social support and grief from a recently deceased husband. The patient then underwent therapy and was able to reclaim the guardianship of her daughter after finishing treatment.

#### **CONCLUSION**

The case illustrated in Netflix's "Virgin River" is an excellent portrayal of child abandonment caused by postpartum depression. The role of family medicine is greatly stressed in the management of both cases and it could be used as a good learning experience for medical students to understand the psychosocial aspect of medical cases.

## **ACKNOWLEDGEMENTS**

We express sincere gratitude to Biro Koordinasi Kesehatan Masyarakat Universitas Airlangga for allowing us to work on this project.

# **REFERENCES**

- [1] T. R. Freeman, McWhinney's Textbook of Family Medicine, 9th ed. Saunders, 2016. doi: 10.1093/med/9780199370689.001.0001.
- [2] M. Kadivar, M. K. Mafinejad, J. T. Bazzaz, A. Mirzazadeh, and Z. Jannat, "Cinemedicine: Using movies to improve students' understanding of psychosocial aspects of medicine," Ann. Med. Surg., vol. 28, no. February, pp. 23–27, 2018, doi: 10.1016/j.amsu.2018.02.005.
- [3] A. P. Association, "Postpartum Depresion Fact Sheet," 2008. <a href="https://www.apa.org/pi/women/resources/reports/postpartum-depression">https://www.apa.org/pi/women/resources/reports/postpartum-depression</a>.
- [4] V. del Barrio, Diagnostic and Statistical Manual of Mental Disorders. 2004. doi: 10.1016/B0-12-657410-3/00457-8.
- [5] D. K. R. Indonesia, Pedoman Penggolongan Diagnosis Gangguan Jiwa di Indonesia. 1993.
- [6] S. Mughal, A. Yusra, and W. Siddiqui, StatPearls. StatPearls Publishing, 2021.
- [7] T. Pearlstein, M. Howard, A. Sallsbury, and Z. Caron, "NIH Public Access. Postpartum depression (Pearlstein)," AM J Obs. Gynecol, vol. 200, no. 4, pp. 357–364, 2009, doi: 10.1016/j.ajog.2008.11.033. Postpartum.
- [8] R. Anokye, E. Acheampong, A. Budu-Ainooson, E. I. Obeng, and A. G. Akwasi, "Prevalence of postpartum depression and interventions utilized for its management.," Ann. Gen. Psychiatry, vol. 17, p. 18, 2018, doi: 10.1186/s12991-018-0188-0.
- [9] S. L. Grace, A. Evindar, and D. E. Stewart, "The effect of postpartum depression on child cognitive development and behavior: a review and critical analysis of the literature.," Arch. Womens. Ment. Health, vol. 6, no. 4, pp. 263–274, Nov. 2003, doi: 10.1007/s00737-003-0024-6.
- [10] C. E. Parsons, K. S. Young, T. J. Rochat, M. L. Kringelbach, and A. Stein, "Postnatal depression and its effects on child development: a review of evidence from low- and middle-income countries.,"

- Br. Med. Bull., vol. 101, pp. 57–79, 2012, doi: 10.1093/bmb/ldr047.
- [11] T. Field, "Postpartum depression effects on early interactions, parenting, and safety practices: a review.," Infant Behav. Dev., vol. 33, no. 1, pp. 1–6, Feb. 2010, doi: 10.1016/j.infbeh.2009.10.005.
- [12] J. F. Paulson, S. Dauber, and J. A. Leiferman, "Individual and combined effects of postpartum depression in mothers and fathers on parenting behavior.," Pediatrics, vol. 118, no. 2, pp. 659–668, Aug. 2006, doi: 10.1542/peds.2005-2948.
- [13] M. C. Lovejoy, P. A. Graczyk, E. O'Hare, and G. Neuman, "Maternal depression and parenting behavior," Clin. Psychol. Rev., vol. 20, no. 5, pp. 561–592, 2000, doi: 10.1016/s0272-7358(98)00100-7.
- [14] W. V Bobo and B. P. Yawn, "Concise review for physicians and other clinicians: postpartum depression.," Mayo Clin. Proc., vol. 89, no. 6, pp. 835–844, Jun. 2014, doi: 10.1016/j.mayocp.2014.01.027.
- [15] C. L. Dennis and K. McQueen, "Does maternal postpartum depressive symptomatology influence infant feeding outcomes?," Acta Paediatr. Int. J. Paediatr., vol. 96, no. 4, pp. 590–594, 2007, doi: 10.1111/j.1651-2227.2007.00184.x.

- [16] C. J. Pope and D. Mazmanian, "Breastfeeding and Postpartum Depression: An Overview and Methodological Recommendations for Future Research.," Depress. Res. Treat., vol. 2016, p. 4765310, 2016, doi: 10.1155/2016/4765310.
- [17] K. T. McLearn, C. S. Minkovitz, D. M. Strobino, E. Marks, and W. Hou, "Maternal depressive symptoms at 2 to 4 months post partum and early parenting practices.," Arch. Pediatr. Adolesc. Med., vol. 160, no. 3, pp. 279–284, Mar. 2006, doi: 10.1001/archpedi.160.3.279.
- [18] S. Watkins, S. Meltzer-Brody, D. Zolnoun, and A. Stuebe, "Early breastfeeding experiences and postpartum depression.," Obstet. Gynecol., vol. 118, no. 2 Pt 1, pp. 214–221, Aug. 2011, doi: 10.1097/AOG.0b013e3182260a2d.
- [19] G. J. Homan, "Failure to Thrive: A Practical Guide.," Am. Fam. Physician, vol. 94, no. 4, pp. 295–299, Aug. 2016.
  [20] L. H. Goh, C. H. How, and K. H. Ng, "Failure to thrive in babies and toddlers," Singapore Med. J., vol. 57, no. 6, pp. 287–291, 2016, doi: 10.11622/smedj.2016102.
  [21] A. Lezo, L. Baldini, and M. Asteggiano, "Failure to Thrive in the Outpatient Clinic: A New Insight.," Nutrients, vol. 12, no. 8, Jul. 2020, doi: 10.3390/nu12082202.