



- Family Caregiver Support Program to Increase Quality Care Among the Geriatric Population
- Nurse Staffing Factors, Fatigue, and Work-related Stress among Emergency Department Nurses During COVID-19 Pandemic
- Relationship between Fine Motor Skill and the Use of Gadget in Pre-school Age Children
- Nursing Students' Caring Behavior Towards Clinical Learning Readiness
- Identification of Risk Factor of Adolescent Sexual Behavior in Purwokerto: Pilot Study
- The Effect of Giving Cucumber (*Cucumis sativus*) Juice on Blood Pressure in Stage 1 Hypertension Patients in Cimahi Public Health Center
- The Relationship Between Mother's Support to the Development Level of Preschool-Age Children
- Knowledge-related Human Papillomavirus Vaccination: A Study of Indonesian Women
- The Effectiveness of Online Education Study Live Method on Reducing Hesitancy of the COVID-19 Vaccine
- The Relationship of Spirituality with Coping Mechanism in Patients with Type 2 Diabetes Mellitus in Sukabumi Regency, Indonesia
- Knowledge and Attitude of Mothers Regarding Early Childhood Health Protocol Implementation During the Covid-19 Pandemic
- Factors Affecting Sleep Quality of Treated Patients In the *Intensive Cardiac Care Unit* Room
- Literature Review: Description of the Psychological Impact of Social Support on Gynecological Cancer Patients
- Implementation of Assertive Training to Increase the Ability of Anger Expression in Violent Behavior Patients at RSMM Bogor
- Use of Mobile Health on Adherence among HIV Positives Person: A Literature Review
- Honey for The Treatment of Diabetic Foot: A Literature Review

JURNAL KEPERAWATAN KOMPREHENSIF	VOL. 9	NO. 1	Page 1 - 127	Bandung January 2023	ISSN 2354-8428  e-ISSN 2598-8727
------------------------------------	--------	-------	-----------------	----------------------------	--

## Research Article

# Identification of Risk Factor of Adolescent Sexual Behavior in Purwokerto: Pilot Study

Endang Triyanto\*

\*Department of Community Nursing - Faculty of Health Sciences, Universitas Jenderal Soedirman, Purwokerto, Indonesia

**\*contact**

endang.triyanto@unsoed.ac.id

Received : 03/12/2022

Revised : 23/01/2023

Accepted : 28/01/2023

Online : 31/01/2023

Published : 31/01/2023

### Abstract

**Introduction:** Adolescent students drop out of school due to sexual behavior. They are depressed and pregnant. The level and risk factors of sexual behavior in Purwokerto are not comprehensively known.

**Aim:** The purpose of this study was to determine the level and risk factors of sexual behavior.

**Methods:** This study uses a quantitative method approach. This type of research is a survey. A survey using the questionnaire that has been statistically tested. Respondents were selected by simple random sampling from April to August 2022 in Purwokerto-Indonesia. Researchers have conducted screening to select adolescents who have risky sexual behavior. A number of 41 adolescents are included in high risk. The data analysis used was descriptive statistics. The data are presented in a frequency distribution table.

**Result:** These risk factors come from individuals, peers, family, and the environment. Risk factors that have been found in this study include lack of knowledge (17%), dating behavior (66%), the negative influence of peers (78%), disharmonious family (32%), lack of attention from parents (56%), a victim of divorce (7%), free environment (68%), the negative influence of social media (61%), and negative values and beliefs (54%). The highest risk factor is peers (78%).

**Conclusion:** All risk factors significantly affect adolescent sexual behavior. Peers was the factor which most highly influence sexual behavior. Therefore, adolescents should have assertive abilities so they are not easily influenced.

### Keywords:

**Dating, pregnancy, reproductive health, sexual, teenager**

## INTRODUCTION

According to the World Health Organization, the age range for adolescents is 10-19 years. The number of adolescents in Purwokerto in 2021 reached around 30.7% of the total population. Adolescents are included as a population at risk, because health, social, and criminal problems often

occur. Adolescent health problems that occur include adolescent pregnancy and cases of abortion (1). Adolescent health problems begin with sexual behavior when they enter puberty. The risk factors for sexual behavior are very complex and always evolve with the development of culture and technology.

Based on the systematic review conducted by Pilgrim et al., (2012) which collected research since 1998, it was found that risk factors for sexual behavior originate from individual factors, peers, family, media, education, economy, culture, society, and government (2). Adolescent behavioral factors are influenced by communication, parents, peer pressure, school, and the environment (3). Lack of communication, familiarity, openness, and parental attention to adolescents will disrupt the process of forming adolescent behavior.

Along with the development of science and technology, there is also a cultural shift. Cultural shifts have resulted in changing dating styles as an internal risk factor for adolescents (4). Based on the results of interviews with adolescents in Purwokerto, they consider it natural to have sexual intercourse during dating as evidence of affection between both of them (1). The adolescent was expelled from school for sexual behavior. Risk factors that threaten adolescent reproductive health make them a vulnerable group (5).

The risk factors for adolescent sexual behavior can be detected early so that it can be handled appropriately according to the existing problems. Routine detection of sexual risk factors can reduce the potential for adverse reproductive health consequences (6). Instruments to detect risk factors for sexual behavior have been developed and meet the requirements of the instrument test (1,2). At any time, the risk factors for adolescent sexual behavior can change and are very dynamic. In Purwokerto there is no research on risk factors for sexual behavior among adolescents. The purpose of this study was to determine the risk factors and risk levels for adolescent sexual behavior in Purwokerto.

## METHODS

This study uses a quantitative method approach. This type of research is a survey. A survey using the questionnaire that has been statistically tested. The questionnaire by Triyanto (7) used contains questions to detect risk factors for adolescent sexual behavior, including individual factors, peers, family, and environment. Data was collected using google form for adolescents who were selected by simple random sampling from April to August 2022 in Purwokerto-Indonesia. Researchers have conducted screening to select adolescents who have risky sexual behavior. A number of 41 adolescents are included in high risk. The data analysis used was descriptive statistics. The data are presented in a frequency distribution table.

## RESULTS

Researchers have identified the risk factors for adolescent sexual behavior in the high-risk category. In filling out the questionnaire, adolescents who have engaged in sexual risk behavior can choose more than one answer option according to their condition. These risk factors come from individuals, peers, family, and the environment. Table 1 shows that the highest risk factor is peers (78%). Peers are the factors that most highly influence sexual behavior. Risk factors that have been found in this study include lack of knowledge (17%), dating behavior (66%), the negative influence of peers (78%), disharmonious family (32%), lack of attention from parents (56%), a victim of divorce (7%), free environment (68%), the negative influence of social media (61%), and negative values and beliefs (54%). All risk factors significantly affect adolescent sexual behavior, because each factors has a p-value less than 0,05.



**Table 1. Risk Factors of Adolescent Sexual Behavior in Purwokerto (N=41)**

Risk factors	Number	Percent	p-value
1 Lack of knowledge	7	17	0,013*
2 Dating behavior	27	66	0,018*
3 The negative influence of peers	32	78	0,022*
4 Disharmonious family	13	32	0,000*
5 Lack of attention from parents	23	56	0,002*
6 Victim of divorce	3	7	0,006*
7 Free environment	28	68	0,001*
8 The negative influence of social media	25	61	0,016*
9 Negative values and beliefs	22	54	0,000*

\* Correlation is significant at the 0,05 level

## DISCUSSION

Discussion on the risk factors for adolescent sexual behavior starts from individual factors, peers, family, and environment.

### Individual

Now, adolescents consider free sex as normal for lovers to have free sex (8). Adolescents believe that if they love each other, then sexual relations are legal even if they are not married. Sexual intercourse is consensual, they think it is not wrong. Teens think that to prove their love for their girlfriends, they need to have sexual intercourse. This kind of thinking can be concluded as a negative norm adopted by adolescents which is a risk factor for adolescent sexual behavior (9).

The negative norms adopted by adolescents trigger adolescent sexual behavior (10). They believe that adolescent sexual behavior is not a violation of norms. This is in accordance with the research of Scorgie who found that in Jamaica there is a culture of children having to have sex to show that he is a man as well as a form of his love. This negative norm adopted by adolescents is a risk factor for adolescent sexual behavior. Sexual activity that is carried out several times freely will cause adolescents to justify risky sexual practices (11).

Some adolescents who have sexual intercourse think that when they have sex only with their boyfriends, they will not contract a sexually transmitted disease. Even though his girlfriend may have sexual relations with other women. Adolescents' ignorance of the consequences of sexual intercourse has been shown to be a significant risk factor for adolescent sexual behavior (12). Adolescents who accept the invitation of their boyfriends to have sexual intercourse according to research by Oluwaseyi et al. it can be caused minimal knowledge about reproductive health, although it is not a guarantee that adolescents who have high knowledge are free from risky behavior (13).

Teens who often spend more time with their boyfriends together trigger sexual behavior. In this study, it was found that female adolescents were no longer vulnerable. In the existence of a consensual relationship, this adolescent is willing to have sexual intercourse (14). The belief that virginity is not a mandatory condition for marriage will encourage the adolescent to have sexual relations freely (15).

According to the theory of the Integrated Behavioral Model, a person's behavior is influenced by lifestyle (16). The findings in this study indicate that adolescents who engage in sexual activity have a free

lifestyle. This study is in accordance with research conducted by Plourde who found that the risk factor for adolescent pregnancy is dating style as much as 42%, drug users as much as 24%, the rest is due to dress style (6). Freedom of expression often doesn't think about the prevailing culture in Indonesia. Adolescent dress styles imitate foreign cultures. Dating styles among adolescent couples like this are in accordance with the findings in the research of Simanjutak who upload intimacy on social media (17). Adolescent lifestyle is proven to be a contributing factor that will influence adolescent behavior.

### Peers

Most adolescents who have had sexual relations are influenced by their peers (18). Sometimes it begins with coercion which eventually becomes a habit. On the other hand, adolescents have sexual intercourse because their friends tease them and say they are cheeky. This fact then motivates adolescents to try to date. Most of the promiscuity of adolescents is caused by the invitation of friends. Peers are the most risk factor among other factors that influence adolescent sexual behavior (12).

The helplessness of an adolescent is shown as a feeling of fear of being cut off by his girlfriend if he doesn't want to follow his girlfriend's orders. In the initial conditions, young girls are willing to follow their boyfriend's invitation to have sexual relations, even though they are afraid (19). Adolescent girls follow the wishes of their boyfriends even though they are not in accordance with their conscience with reasons of pity and fear of being cut off by their boyfriends. The first sexual activity feels safe, so he is moved to do it repeatedly. This is in line with a study by Andriani which found that adolescents often accept boyfriends' requests and dare not refuse (20). This is a factor that triggers adolescent involvement in sexual activity. Therefore, it is necessary to have the assertive ability of adolescents to increase their ability to refuse friend invitations, if the invitation

includes bad behavior and is against the prevailing norms.

This negative peer influence is in accordance with the research of Scorgie which explains that there are 12 studies that describe a man who asked him to do sexual acts for the first time and even had more than one partner (21). Research by Konstant found that the male gender is the main contributor to sexual behavior among adolescents. In Uganda, men will be ridiculed and considered strange if they don't have a boyfriend (22). In accordance with the qualitative study Goesling stated that as evidence of mutual love, a male adolescent wants to be disclosed by having sex (10). The influence of peers is proven to be the most dominant factor in influencing adolescent reproductive health behavior.

Adolescents are often closer to their peers than to family (23). Adolescents sometimes take advice from friends more than advice from parents. They are afraid to get ridiculed by their friends if they do not participate in the promiscuity of their peers. The results of this study are in line with the research of Worling who found that adolescents began to make friends as part of life and try to be the same as other friends (24). In the study, Gavin adds that adolescence is the age of experiencing social hunger (social thirst) which is characterized by an excessive desire to socialize (25). Researchers concluded that the choice of friends is very important for adolescents. If his friend is good, then the effect is good, if his friend is bad, then the adolescent will also act badly (26).

### Family

The relationship between adolescents and their families determines their behavior patterns (27). Family becomes the first environment to shape adolescent behavior. Teens with a history of broken home families will try to find fun with their boyfriends. This can be caused by the treatment of his father who is not attentive and busy with his new wife, as well as his mother who spends more time with her

new husband. Lack of love from parents and lack of quality and quantity of communication often motivates adolescents to try to leave home (28). He will hang out freely with his friends so that he is closer to friends than his parents. This kind of adolescent interaction with family can be said to be a significant risk factor affecting adolescent sexual behavior (13).

The study of Khoirun, Rahayuningsih, and Purwara found that supervision at the family level of adolescent sexual behavior patterns was still low (12). Research by Rowsell reported that in Ethiopia only 36.8% of adolescents had discussions about reproductive health with their parents (29). In line with that, the research of Samuel found cases of sexual intercourse that took place in an empty house where parents were busy at work and lack of supervision of their adolescent children. Teens feel left alone and unknown for all their behavior (30). Parenting style is a factor that can influence adolescent behavior.

Parenting patterns can be manifested in effective communication, attention, and affection given to adolescents (31). Parents must also instill positive behavior formation from an early age. According to research by Matejevic, a harmonious relationship between parents and adolescents can be a protector of reproductive health, because the family is a micro-system for adolescents. The results of the study by Schmidt found a significant relationship between parenting style and adolescent assertive behavior as a method of maintaining reproduction health (32).

Triyanto, Isworo, and Latifah (2016) add that the type of parenting style that is effective in increasing the assertive behavior of adolescents is the selling type. Family factors as the main environment for adolescents play an important role in helping adolescents achieve reproductive health. The role of the family is very important as a vehicle for transferring values in the family (33).

## Environment

The environment is a factor that significantly influences adolescent sexual behavior. A boarding house that is free and has no boarding house guard is a choice for the adolescent to have sexual intercourse. Urban areas that tend not to care about life in their surroundings cause an adolescent to freely engage in dating activities (34). The absence of a warning from local residents regarding their activities with their friends has triggered youth to be free to do activities. In fact, there is a service place for abortion. The results of this study indicate that adolescents who live in areas with loose or free rules are more likely to have sexual relations with their boyfriends. Based on the study by Ivanova, the absence of community control triggers adolescents to freely associate with their friends regardless of community norms (35).

A large number of nightclubs and "hang out" places trigger adolescents to do whatever they want with their boyfriends. Such environmental conditions are a risk factor for adolescent sexual behavior. Environmental conditions are a risk factor for adolescent reproductive health behavior (36). The absence of a deterrent effect for perpetrators of free sex causes adolescents to justify risky sexual practices and even imitate them. The environment should be a barrier and control for adolescents in their behavior.

Community supervision through prevailing and agreed norms can prevent adolescents from associating freely, especially in dating. The findings are similar to the research of Darabi that adolescents who live in boarding houses have a greater risk of premarital sexual behavior than adolescents who live together with their parents (37). Community indifference or indifference is an indicator of environmental risk factors, on the other hand, this environment can be a protective factor if it has an indicator of strict norms or rules about community behavior.

Special rules for adolescents can be realized by enforcing a curfew for guests, not allowing the adolescent to stay alone if guests are staying overnight they must report, and internet places must be open (8).

## CONCLUSION

These risk factors come from individuals, peers, family, and the environment. The highest risk factor is peers (78%). Peers are the factors that most highly influence sexual behavior. Therefore, adolescents should have assertive abilities so they are not easily influenced.

## CONFLICT OF INTEREST

All authors declared that there is no conflict of interest regarding the publication of this article.

## ETHICAL CONSIDERATION

Before collecting the data, respondents were given an explanation about the aim and nature of this study, and they signed an informed consent form if they agreed to participate. The five rights of human subjects in the research, including self-determination, privacy, dignity, anonymity, and confidentiality, were maintained throughout the study. This study has gained ethical approval from the Health Research Ethics Committee no 715/EC/KEPK/IV/2022.

## ACKNOWLEDGMENTS

The author would like to thank profusely to all respondents who have participated in this research.

## REFERENCES

1. Triyanto E, Prabandari YS, Yuniarti KW, Werdati S. Identification factors affecting adolescent's reproductive health behavior: a qualitative study. *Bali Med J*. 2019;8(3):852.
2. Pilgrim NA, Ph D, Blum RW, Ph D. Protective and Risk Factors Associated with Adolescent Sexual and Reproductive Health in the English-speaking Caribbean : A Literature Review. *JAH [Internet]*. 2012;50(1):5–23. Available from: <http://dx.doi.org/10.1016/j.jadohealth.2011.03.004>
3. Meinck F, Cluver LD, Boyes ME, Mhlongo EL. Risk and Protective Factors for Physical and Sexual Abuse of Children and Adolescents in Africa : A Review and Implications for Practice. 2015;16(1):81–107.
4. Poutiainen H, Levälähti E, Hakulinen-Viitanen T, Laatikainen T. Family characteristics and health behaviour as antecedents of school nurses' concerns about adolescents' health and development: A path model approach. *Int J Nurs Stud [Internet]*. 2015;52:920–9. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S0020748915000024>
5. Lopez JR, Mukaire PE, Mataya RH. Characteristics of youth sexual and reproductive health and risky behaviors in two rural provinces of Cambodia. *Reprod Health [Internet]*. 2015;1–12. Available from: <http://dx.doi.org/10.1186/s12978-015-0052-5>
6. Plourde KF, Fischer S, Cunningham J, Brady K, Mccarraher DR. Improving the paradigm of approaches to adolescent sexual and reproductive health. *Reprod Health [Internet]*. 2016;1–4. Available from: <http://dx.doi.org/10.1186/s12978-016-0191-3>
7. Triyanto E, Prabandari YS, Yuniarti KW, Werdati S. Faktor-Faktor Multisistem Yang Memengaruhi Perilaku Seksual Remaja. *J Ners Community*. 2019;10(02):197–210.
8. Abujaradeh H, Colaianne BA, Roeser RW, Tsukayama E, Galla BM. Evaluating a short-form Five Facet Mindfulness Questionnaire in adolescents: Evidence for a four-factor structure and

- invariance by time, age, and gender. *Int J Behav Dev.* 2020;44(1):20–30.
9. Filippello P, Harrington N, Buzzai C, Sorrenti L, Costa S. The Relationship Between Frustration Intolerance, Unhealthy Emotions, and Assertive Behaviour in Italian Students. *J Ration Cogn Ther [Internet]*. 2014;32:257–78. Available from: <http://link.springer.com/10.1007/s10942-014-0193-4>
  10. Goesling B, Ph D, Colman S, Ph D, Trenholm C, Ph D, et al. Programs to Reduce Teen Pregnancy , Sexually Transmitted Infections , and Associated Sexual Risk Behaviors : A Systematic Review. *J Adolesc Heal [Internet]*. 2014;54(5):499–507. Available from: <http://dx.doi.org/10.1016/j.jadohealth.2013.12.004>
  11. Kheswa JG. Psychological Well-being , Alcohol Abuse and Sexual Behaviour among African Adolescent Males in South Africa. 2015;6(1):32–40.
  12. Khoirun Q, Mairo N, Rahayuningsih SE, Purwara BH. Kesehatan Reproduksi Remaja Putri di Pondok Pesantren Sidoarjo Jawa Timur Reproductive Health of Adolescent Girls in Islamic Boarding School Sidoarjo East Java. 2015;47(2):77–83.
  13. Oluwaseyi A, Maja SCD, Todd M. Community Participation In Teenage Pregnancy Prevention Programmes : A Systematic Review. 2015;
  14. Li SY, Roslan S, Abdullah MC, Abdullah H. Commuter Families: Parental Readiness, Family Environment and Adolescent School Performance. *Procedia - Soc Behav Sci [Internet]*. 2015;172:686–92. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S1877042815004577>
  15. Salam RA, Sc M, Faqqah A, D M, Sajjad N, S MBB, et al. Improving Adolescent Sexual and Reproductive Health : A Systematic Review of Potential Interventions. 2016;59.
  16. Hindin MJ, Ph D, Kalamar AM, Ph D. Detailed Methodology for Systematic Reviews of Interventions to Improve the Sexual and Reproductive Health of Young People in Low- and Middle-Income Countries. *J Adolesc Heal [Internet]*. 2016;59(3):S4–7. Available from: <http://dx.doi.org/10.1016/j.jadohealth.2016.07.009>
  17. Simanjuntak M, Manurung S, Riana L, Payung H. Perilaku Remaja Putri Menghadapi Menarche Berdasarkan Nilai Budaya Batak Adolescent Girls Behaviour Encountering Menarche Phase According to. *J Kesehat Masy Nas.* 2013;7(9):421–5.
  18. Santa Maria D, Markham C, Bluethmann S, Mullen PD. Parent-Based Adolescent Sexual Health Interventions And Effect on Communication Outcomes: A Systematic Review and Meta-Analyses. *Perspect Sex Reprod Health [Internet]*. 2015;47:37–50. Available from: <http://doi.wiley.com/10.1363/47e2415>
  19. Harris-fry HA, Azad K, Younes L, Kuddus A, Shaha S, Nahar T, et al. Formative evaluation of a participatory women ' s group intervention to improve reproductive and women ' s health outcomes in rural Bangladesh : a controlled before and after study. 2016;1–8.
  20. Andriani G. Hubungan Faktor Personal Dengan Perilaku Seksual Remaja Pada Mahasiswa Program Studi Diii Kebidanan Fakultas Ilmu Kesehatan Universitas Respati Yogyakarta Tahun 2013. *Makara.* 2013;10(1):29–40.
  21. Scorgie F, Chersich MF. Socio-Demographic Characteristics and Behavioral Risk Factors of Female Sex Workers in Sub-Saharan Africa : A Systematic Review. 2012;920–33.
  22. Konstant TL, Rangasami J, Stacey MJ, Stewart ML. Estimating the Number of Sex Workers in South Africa : Rapid Population Size Estimation. 2015;



23. Yadeta TA, Bedane HK, Tura AK. Factors Affecting Parent-Adolescent Discussion on Reproductive Health Issues in Harar , Eastern Ethiopia : A Cross-Sectional Study. 2014;2014.
24. Worling JR, Langton CM. A Prospective Investigation of Factors That Predict Desistance From Recidivism for Adolescents Who Have Sexually Offended. 2015;
25. Gavin LE, Williams JR, Rivera MI, Lachance CR. Programs to Strengthen Parent-Adolescent Communication About Reproductive Health. *Am J Prev Med* [Internet]. 2015;49(2):S65-72. Available from: <http://dx.doi.org/10.1016/j.amepre.2015.03.022>
26. Kartika A. FENOMENA KENAKALAN REMAJA DALAM PERSPEKTIF PSIKOLOGI PENDIDIKAN ISLAM (Studi Kasus Penganiayaan yang Menyebabkan Kematian di Dusun Kayunan Kabupaten Sleman). *G-COUNS J Bimbingan dan Konseling*. 2017;2(1):59-74.
27. Santelli J. NIH Public Access. *Changes*. 2012;29(3):997-1003.
28. Mulati D, Lestari DI. Hubungan Penggunaan Media Sosial Dan Pengaruh Teman Sebaya Dengan Perilaku Seksual Remaja. *J Kesehat Masy*. 2019;3(1):24-34.
29. Rowsell HC. Exploring the link between emotional awareness and social functioning during adolescence. 2015;
30. Samuel T. SEXUAL ABSTINENCE KNOWLEDGE AND BEHAVIOUR OF SECONDARY SCHOOL ADOLESCENTS IN KUBWA. 2015;5(1):103-6.
31. Matejevic M, Jovanovic D, Ilic M. Patterns of Family Functioning and Parenting Style of Adolescents with Depressive Reactions. *Procedia - Soc Behav Sci* [Internet]. 2015;185:234-9. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S1877042815022533>
32. Schmidt SR. Integrating Families into Treatment for Adolescents with Illegal Sexual Behavior [Internet]. *Toolkit for Working with Juvenile Sex Offenders*. Elsevier Inc.; 2014. 507-532 p. Available from: <http://linkinghub.elsevier.com/retrieve/pii/B9780124059481000207>
33. Williams GM. Adolescent Sexual Health : Provider Evaluation of a Sexual History Tool at a School-Based Health Clinic. 2018;
34. Yudia SM, Cahyo K, Kusumawati A, Pendidikan B, Perilaku I. Perilaku Seksual Pranikah Pada Mahasiswa Kost (Studi Kasus Pada Perguruan Tinggi "X" Di Wilayah Jakarta Barat). *J Kesehat Masy*. 2018;6(1):819-25.
35. Ivanova O, Pozo KC, Segura ZE, Vega B, Chandra-Mouli V, Hindin MJ, et al. Lessons learnt from the CERCA Project, a multicomponent intervention to promote adolescent sexual and reproductive health in three Latin America countries: A qualitative post-hoc evaluation. *Eval Program Plann* [Internet]. 2016;58:98-105. Available from: <http://dx.doi.org/10.1016/j.evalprogplan.2016.06.007>
36. Santoso EB. Hubungan Pengetahuan dan Perilaku Teman Sebaya Dengan Perilaku Seks Berisiko HIV dan IMS Pada Remaja di Kabupaten Banyuwangi. *J Info Kesehat*. 2017;13(01):15-20.
37. Darabi F, Kaveh MH, Farahani FK, Yaseri M, Majlessi F, Shojaeizadeh D. The effect of a theory of planned behavior-based educational intervention on sexual and reproductive health in iranian adolescent girls: A randomized controlled trial. *J Res Health Sci*. 2017;17(4).