



# Empowerment of Youth Information and Counseling Center (PIK-R) for Early Marriage Independence among Adolescent Girls

Dwi Purwanti\*, Rijanto Rijanto, Tatarini Ika Pipit Cahyani, Fitria Nurwulansari

Departemen of Midwifery, Politeknik Kesehatan Kementerian Kesehatan, Surabaya, Indonesia

## Abstract

**INTRODUCTION:** Early marriage may compromise the reproductive health of adolescent girls. Youth empowerment through the Youth Information and Counseling Center (PIK-R) needs to be done, to increase awareness of adolescent girls about their reproductive right.

**AIM:** This study aims to analyze the effect of empowering the PIK-R group with the Emo Demo method on early marriage independence in young women, through training activities.

**METHODS:** Design of this study used a quasi-experimental design with one-group pretest-posttest design. Thirty adolescent girls from the PIK-R group were selected by simple random sampling. The research variables were the Emo Demo method and early marriage independence. Research instruments used Emo Demo module and questionnaire of early marriage independence from the previous study by Purwanti *et al.* The data were analyzed descriptively to determine the frequency distribution of early marriage independence before and after the intervention. Furthermore, data analysis used Wilcoxon signed-ranks test to assess the effect of youth empowerment through the PIK-R among adolescent girls.

**RESULTS:** The result of this analysis showed that the empowerment of PIK-R group using the Emo Demo method has a significant impact on the early marriage independence among adolescent girls with  $p = 0.001$ .

**CONCLUSION:** Empowerment of the Youth Information and Counseling Center (PIK-R) group with the Emo-Demo method increases awareness of the potential of youth and the desire to develop it so that they can achieve independence. It is recommended that in the development of group empowerment, information centers and youth counseling can apply the Emo-Demo method, because this method has proven to be effective.

**Edited by:** Sasho Stoileski/  
**Citation:** Purwanti D, Rijanto R, Cahyani TIP, Nurwulansari F. Empowerment of Youth Information and Counseling Center (PIK-R) for Early Marriage Independence among Adolescent Girls. Open-Access Maced J Med Sci. 2022 Feb 05; 10(E):617-621. <https://doi.org/10.3889/oamjms.2022.7291>  
**Keywords:** Empowerment; Adolescent; Marriage; PIK-R (Youth Information and Counseling Center)  
**\*Correspondence:** Dwi Purwanti, Department of Midwifery, Politeknik Kesehatan Kementerian Kesehatan, Surabaya, Indonesia. E-mail: [dwipurwanti1967@gmail.com](mailto:dwipurwanti1967@gmail.com)  
**Received:** 13-Sep-2021  
**Revised:** 21-Nov-2021  
**Accepted:** 22-Feb-2022  
**Copyright:** © 2022 Dwi Purwanti, Rijanto Rijanto, Tatarini Ika Pipit Cahyani, Fitria Nurwulansari  
**Funding:** This study was supported by Health Surabaya Ministry of Health Polytechnic  
**Competing Interest:** The authors have declared that no competing interest exists  
**Open Access:** This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0)

## Introduction

Early marriage is a common phenomenon in many developing countries including Indonesia [1]. Early marriage defined as marriage in which one or both partners are children under the age of 18 years and it is a violation of basic human rights, especially for girls [2]. Cultural practices and values that undermine women's empowerment are associated with early marriage [3]. With the problem of the high rate of early marriage among young women, training was conducted using the Emo Demo method [2], [3].

One in three girls in the developing countries (excluding China) is married before 18 years of age, and one in seven is married before 15 years of age. An estimated 10 million early marriages occur every year [4]. In Indonesia, the prevalence of early marriage has decreased more than doubled in the past three decades but it is still one of the highest in East Asia and Pacific [4]. Indonesia is a country with the highest prevalence of early marriage second only to Cambodia in the Southeast Asia [5]. According to the Social and Economic Survey National conducted by the Central Statistics Agency (BPS) in 2012 showed that among ever-married women aged 20–24 years, 25% were

married before the age of 18 [6]. East Java is one of the provinces in Indonesia which has a percentage of early marriage 24.45%, above the national average (22.82%). Banyuwangi District is the ninth of 38 districts in East Java with the percentage of early marriage 25.64% [7].

Early marriage ends adolescence period that should be the time for their physical, emotional, and social development. Adolescence period is also very important for them because this is the time they got prepare for enter adulthood [8]. Early marriage for girls can lead to complications related to pregnancy and childbirth [9]. Adolescent girls who become pregnant are less likely to conducted antenatal care visits than young adult women so that this has the risk of having a health impact on the child who is born [10].

Girls who are married before the age of 18 have a degree lower educational attainment compared to the girls who are unmarried, especially after elementary school. Adolescent girls are less likely to continue school after they get married [7]. Marriage can mean the end of her education, can set aside her chances of a vocation or career, and can steal from her foundational life choices. Choosing when and who to marry is one of life's most important decisions [9].

Ending early marriage will help countries reach the fifth goal on sustainable development goals (SDGs), namely, achieving gender equality through the empowerment of women and adolescent girls. The target indicator is to reduce harmful practices in children, including ending early marriages by 2030 [9]. The SDGs target is supported by the Government of Indonesia by taking a direct approach to adolescent girls through the Planning Generation (GenRe) program, by developing Youth Information and Counseling Center (PIK-R) as a forum to prepare family life for adolescents through providing information services and counseling on family life planning including reproductive health information and other supporting activities [11].

Besides that, the government has the other program called Family Planning Village (Kampung KB) as a means of community empowerment from the National Population and Family Planning Agency (BKKBN) to improve the quality of life of the community at the level village to create quality small families. Family Planning Village is a national program which includes four programs, namely, marriage age maturity, use of contraception, family resilience, and improvement productive economy. Every Family Planning Village exist the PIK-R that gives adolescents the opportunity to get information about health reproduction and the dangers of early marriage. Thus, it can increase awareness of adolescent girls about their reproductive right and they will have good information in determines what is best for their life [12].

However, the PIK-R program in Family Planning Village has not been optimally implemented, the adolescents only come when there are certain events. The activities in PIK-R should be able to attract the adolescents to come so that the strategies to improve the utilization of the PIK-R are urgently needed [13].

Community empowerment is an effort or process to raise awareness, willingness, and ability of the community to recognize, overcome, maintain, protect, and improve their own welfare. Empowering adolescents are an effort to explore the potential of adolescents and make them as human beings who are responsible for both themselves and the environment so that youth empowerment aims to encourages adolescents to be more independent (Notoatmodjo, 2012). The Emotional Demonstration method, abbreviated as Emo Demo, is a participatory, innovative and fun method to change behavior. The fun thing will make it easier to take action [14]. Therefore, the Emo Demo method is expected to increase youth participation in the PIK-R activities so that will improve independence of the adolescent girls themselves. Based on these problems, the purpose of the study was to analyze the effect of youth empowerment in the PIK-R using the Emo Demo method on early marriage independence among adolescent girls.

## Methods

This research is a quasi-experimental research with a one-group pretest-posttest design approach. This research was conducted in the Family Planning Village, Banyuwangi Regency, East Java, Indonesia, October–September 2020. The population is all young women who are members of the PIK-R group at the research location. The population is 90 teenagers. The sample size is 30 respondents determined by the Slovin method. The sampling technique is simple random sampling. The independent variable is the Emo Demo method, the dependent variable is the independence of young women in early marriage. The research instrument used a questionnaire and an Emo Demo module on preventing early marriage in adolescents (Purwanti *et al.*, 2020). Data analysis was carried out descriptively and analytically with the Wilcoxon signed-ranks test to assess the differences before and after being given the Emo Demo method. The error rate was set at  $<0.05$ .

## Results

The following tables show the results of the intervention for 30 adolescent girls in the group of PIK-R in Banyuwangi District. The early marriage independence was measured before and after the intervention.

Table 1 shows the early marriage independence from the 30 respondents increased before the intervention that was 6.7% and after the intervention it became 40%.

**Table 1: Descriptive statistic of pre-test and post-test of early marriage independence result, October 2020 (n = 30)**

Early marriage independence	Pre		Post	
	n	%	n	%
Independent	2	6.7	12	40
Not independent	28	93.3	18	60
Total	30	100	30	100

Table 2 shows that there is a significant difference in the independence of early marriage in young women after the intervention of adolescent empowerment through the Information and Counseling Center for Adolescents with the Emo Demo method, where the independence of early marriage will improve after the intervention, the results of the Wilcoxon test obtained  $p = 0.001 < 0.05$ .

**Table 2: The Wilcoxon signed two rank test result of the effect of the Emo Demo method on early marriage independence among adolescent girls, October 2020 (n = 30)**

Variable	Score, mean $\pm$ SD		Difference in mean	p
	Pre	Post		
Early marriage independence	39.83 $\pm$ 11.550	52.28 $\pm$ 16.054	12.54	0.001

SD: Standard deviation.

## Discussion

The early marriage independence among adolescent girls in the PIK-R before the intervention was very low (6.7%). Our analysis found that the low of early marriage independence among adolescent girls is due to the low of their understanding about the impact of early marriage. The lack of knowledge results in low awareness of the importance of their reproductive rights.

The culture of early marriage is also still found in some villages. It is still a culture as well as a pride for some parents when girls can get married at a young age. They are less aware of the problems that can arise, that are high risk for pregnant women, nutritional prone, unwanted pregnancy, abortion, maternal/infant mortality, and domestic violence [15]. A study by Delprato and Akyeamong suggested that more strategies should be put in place of empower adolescent girls with health information and skills [3]. Policies that support women's rights in decision-making can increase their independence in the use of their voice in terms of delaying marriage [3].

The WHO guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in the developing countries highlighted areas in which evidence needs to be strengthened that are interventions to inform and empower adolescent girls, their families, and their communities to delay the age of marriage [16]. A number of efforts have been made by the Indonesian government to improve gender equality in an effort to reduce early marriage through empowerment women and adolescents in several program including Family Planning Village (Kampung KB), Planning Generation (GenRe), and PIK-R. According to Delprato and Akyeamong, delaying age of marriage among adolescents could be accomplished by community policies and women's health empowerment. Thus, this can provide benefits for maternal and children's health [3].

After being given the intervention, this research found differences in the scores of adolescent early marriage independence. Our study found that the early marriage independence increased after being given the intervention of Emo Demo method. According to the obtained results, it has been concluded that there is statistically significant difference between the early marriage independence among adolescent girls before and after the intervention of youth empowerment through the PIK-R using the Emo Demo method, where the early marriage independence is getting better after the intervention.

Empowerment of adolescents using Emo Demo method in the PIK-R can improve the early marriage independence among adolescent girls. Empowerment is an effort to foster individual or group understanding so that awareness arises to take action.

Empowering adolescents is an effort to explore the potential of adolescents and make them as human beings who are responsible for both themselves and the environment [17].

Empowerment is a process of giving the ability to help someone who is not yet empowered to become more empowered. The provision of this ability is carried out by those who have the ability to help those who are not yet empowered to become empowered. The PIK-R group is a potential group in the Family Planning Village that can be empowered in transferring knowledge and skills. PIK-R Group is one of the platforms developed in the Generation Planning (GenRe) program, namely program managed by youth to provide information and counseling services, to reach maturity in entering the age of marriage [11].

PIK-R is a form of youth empowerment that encourages adolescents to be more independent. Through the youth empowerment, there is a transfer of knowledge and skills so that individuals are aware of their potential so that they are able to achieve independence. Independent individuals are defined as individuals who dare to make decisions based on an understanding of all the disadvantages of their actions [18]. It is expected that through the youth empowerment adolescents will have a good understanding as a basis for making decisions on their reproductive health.

In addition, the youth empowerment in the PIK-R group also aims to generate adolescents to have awareness independently in transferring knowledge about early marriage to their peers. This is confirmed by Kusumawati in her research on application of Adolescent' Home (Rumah Remaja) as an innovation of youth empowerment, showed that through the youth empowerment, adolescents have the ability to transfer their knowledge to their peers and influence them to make healthy and responsible decisions [13]. A study by Estiwidani and Maryani said that youth empowerment with peer group approach can improve adolescent knowledge and behavior on reproductive health issues. Peers have a very large role for adolescents. Peers are one of the driving factors that have an influence in encouraging adolescents to do health behavior including decision-making on early marriage [15]. In addition, a study by Rahmawati *et al.* showed that peers have a positive function to encourage young people to take new roles and responsibilities so that they are not always being dependent on their families [19]. Hence, the empowerment emphasizes that people acquire sufficient knowledge, skills, and power to influence their lives and the lives of others they care about.

The Emo Demo method is an innovation of youth empowerment in the PIK-R. The Emo Demo method is one of developing methods in health promotion against early marriage prevention [14]. The Emo Demo module contains health education in the form of games so that adolescent girls understand the culture of society and the socioeconomy associated with early marriage, as well as the impact of pregnancy outside of marriage. It

is expected that the Emo Demo module can be used as a reference of behavior change methods for preventing early marriage in adolescent girls. This method is very participatory which aims to deliver a simple messages in a way that is fun and emotionally touching and uses props so that they will make them more memorable.

A study by Handayani *et al.* found that health education using playing snake ladders media increases the knowledge of adolescents about the risk of early marriage. Adolescents are very enthusiastic participating in the discussion while playing the snake and ladder game with a group of friends. They are also easily understood the material given because they feel attracted to the snake ladder media. This study showed that the use of learning method and media according to the age of the respondent has a positive impact on the ease of capturing and understanding the material or information [20]. Emo Demo is a participatory, innovative, and fun method to change behavior, and this fun thing will make it easier to take action. This technique relies on an emotional approach and demonstrations (live demonstrations) so that it is more inspiring and easier to understand.

The results of this study corroborate with previous findings where the study conducted by Zakiyyah *et al.* found that health education using the Emo-Demo method can improve the behavior of both knowledge, attitudes and actions. Activities with the emotional power are given to the mother through fun games, demonstrations, and watching movies. The name of ATIKA (Ati, Telur, and Ikan) is one of the methods in Emo Demo module. The ATIKA has a meaning of the food that must be consumed by children under 3 years of age. Through this interesting term, it is hoped that mothers will always remember to provide a menu of healthy food consumption for the health of their children [21].

Emo Demo is a behavior change method using the principles, namely, *Simple*: Focus on one key message so it is simpler, *Stories*: Emo Demo is delivered in the form of a story so it is easy to remember, *Emotional*: Emo Demo will stimulate emotional reactions from participants, *Real*: Emo Demo will use real examples and props, *Unexpected*: Emo Demo can have an unexpected effect to attract people's attention, and *Social*: Emo Demo uses group dynamics and it is based on social context (daily events in society) [14]. Emo Demo is a community education method developed by the Global Alliance for Improved Nutrition. Emo Demo is developed based on behavior-centered design theory that uses science and creativity. This theory holds that behavior can only change in response to something new, challenging, surprising, or interesting [22].

The module on our study discusses the impact of pregnancy outside of marriage. The topic aims to stimulate emotional reactions from the adolescents that can be generated to change the behavior of research

subjects. Our study is consistent with the study by Amareta and Ardianto showed that there is an effect of Emo Demo method on increasing the practice of washing hands with soap. In this study, disgust is one of the emotional reactions that can be generated to change the behavior of research subjects. Effective behavior change may require more than just health information. Besides providing health information, the Emo Demo method is also inspiring emotions possessed by the subject so that the subject will be motivated to make changes in behavior [23]. Change can only occur as response to new things, evocative, and fun [22].

The usual methods of health education tend to impart knowledge before new behaviors are formed. However, the Emo Demo method uses the behavioral centered design (BCD) approach. This approach seeks to include psychological elements as an innovation to change individual behavior. The combination of science and creativity in the composition of messages makes this method transfer behavior change messages more easily to the target audience [23].

Overall, the study results provide new insights into the strategy delaying early marriage through youth empowerment in the PIK-R group. In our knowledge, this study is the first study using Emo Demo method for empowering adolescent in reducing early marriage. Nevertheless, our study has a number of limitations. The limitation of this study is the absence of a control group, because during this pandemic, it is difficult to find respondents who are willing to take part in offline activities.

## Conclusion

The youth empowerment through the PIK-R has a significant impact on the early age marriage independence among adolescent girls. Empowerment PIK-R uses the Demo Emo method to improve awareness of the potential of youth and the desire to develop it in order to achieve and be independent. This study is recommended for implementing new strategy in youth empowerment in the PIK-R. Demo Emo as a method Education for the prevention of early marriage can be used as a reference in the PIK-R empowerment process.

### **Ethical clearance**

All procedures performed in studies involving human participants were in accordance with the ethical standards of the Institutional Research Committee and with the 1964 Helsinki Declaration. This study has received ethical clearances from the Health Research Ethics Committee of the Health Polytechnic Ministry of Health Surabaya No. EA/335/KEPK-Poltekkes\_Sby/V/2020.

## References

- Natanael J, Fajar MM, Rizky RM. Child Poverty and Social Protection Conference Prevalence of Child Marriage and Its Determinants among Young Women in Indonesia; 2013. p. 1-27. Available from: <https://www.media.neliti.com/media/publications/605-EN-prevalence-of-child-marriage-and-its-determinants-among-young-women-in-indonesia.pdf> [Last accessed on 2020 Aug 20].
- BPS. Delayed Improvement: Analysis of Child Marriage in Indonesia; 2016. Available from: <https://www.media.neliti.com/media/publications/48191-ID-kemajuan-yang-tertunda-analisis-data-perkawinan-usia-anak-di-indonesia.pdf> [Last accessed on 2020 Aug 20].
- Delprato M, Akyeamong K. The effect of early marriage timing on women's and children's health in Sub-Saharan Africa and Southwest Asia. *Ann Glob Health*. 2017;83(3-4):557-67. <https://doi.org/10.1016/j.aogh.2017.10.005> PMID:29221529
- UNICEF. Progress for Children. UNICEF; 2010. Available from: <https://www.data.unicef.org/resources/progress-children-report/> [Last accessed on 2020 Aug 20].
- Ministry of Health. Adolescent Reproductive Health Situation; 2017. p. 1-8. Available from: [https://www.kemkes.go.id/download.php?file=download/pusdatin/infodatin/infodatin\\_reproduksi\\_remaja-ed.pdf](https://www.kemkes.go.id/download.php?file=download/pusdatin/infodatin/infodatin_reproduksi_remaja-ed.pdf) [Last accessed on 2020 Aug 20].
- BPS. National Socio-Economic Survey (SUSENAS) – Socio-Culture and Education Module (Annual), 2018; 2018. p. 1-6. Available from: <https://www.sirusa.bps.go.id/sirusa/index.php/dasar/pdf?kd=1581&th=2018> [Last accessed on 2020 Aug 20].
- BPS. Child Marriage in Indonesia (2013 and 2015). Jakarta: BPS; 2017. Available from: <https://www.bps.go.id/publication/> [Last accessed on 2020 Aug 20].
- United Nation's Children's Fund. State of the World's Children 2014 in Numbers: Every Child Counts. Uzbekistan: United Nation's Children's Fund; 2014. Available from: <http://www.unicef.org/sowc2014/numbers/> [Last accessed on 2020 Aug 20].
- Loaiza E, Wong S. Marrying Too Young, United Nations Population Fund UNFPA; 2012. Available from: <https://www.unfpa.org/sites/default/files/pub-pdf/MarryingTooYoung.pdf> [Last accessed on 2020 Aug 20].
- Efendi F, Chen CM, Kurniati A, Berliana SM. Determinants of utilization of antenatal care services among adolescent girls and young women in Indonesia. *Women Health*. 2017;57(5):614-29. <https://doi.org/10.1080/03630242.2016.1181136> PMID:27230132
- Rini IM, Tjadikijanto YD. Overview of the Planning Generation Program (GenRe) in Indonesia and in East Java Province in 2017. *Jurnal Biometrika dan Kependudukan*. 2019;7(2):168. <https://doi.org/10.20473/jbk.v7i2.2018.168-177>
- Wita IM. Implementation of Kampung KB in Increasing Community Self-Help at Kampung KB Kecamatan Nagrak Kabupaten Sukabumi. *SPEKTRUM: Jurnal Pendidikan Luar Sekolah (PLS)*. 2019 Jun 28;7(2):163-8. <https://doi.org/10.24036/spektrumpls.v2i2.10323>
- Kusumawati NF. Youth house as adolescent reproductive health empowerment model. *Jurnal Promkes*. 2013;1(2):153-63. Available from: <http://www.journal.unair.ac.id/filerPDF/jupromkes8a034f9e742full.pdf>. [Last accessed on 2020 Aug 20].
- Purwanti D, Suparji S, Heru SW. The emo-demo method is an effective method in preventive behavior change in early marriage of young women. *J Health Res*. 2020;11:101-6. <http://dx.doi.org/10.33846/sf11nk417>
- Estiwidani D, Maryani T. The effect community empowerment of adolescent to increase knowledge and attitude of young age marriage. *Jurnal Kesehatan Ibu dan Anak*. 2018;12(1):18-28.
- WHO and UNFPA. Preventing Early Pregnancy and Poor Reproductive Outcomes Among Adolescents in Developing Countries: What The Evidence Says; 2008. p. 1-8. Available from: [https://www.who.int/immunization/hpv/target/preventing\\_early\\_pregnancy\\_and\\_poor\\_reproductive\\_outcomes\\_who\\_2006.pdf](https://www.who.int/immunization/hpv/target/preventing_early_pregnancy_and_poor_reproductive_outcomes_who_2006.pdf) [Last accessed on 2020 Aug 20].
- Notoatmodjo S. Health Promotion & Behavioral Sciences. Jakarta: Rineka Cipta; 2012. Available from: <http://www.repository.ui.ac.id/dokumen/lihat/5848.pdf> [Last accessed on 2020 Aug 20].
- Ali M, Asrori M. Adolescents Psychology: Student Development. Jakarta: Bumi Aksara; 2017.
- Rahmawati AH, Suwarjo S, Utomo HB. The effect of basic skills counseling as vital skills in peer counseling to Indonesian students. *Univ J Educ Res*. 2019;7(9):1874-81. <https://doi.org/10.13189/ujer.2019.070905>
- Handayani S, Monika R, Pipit P. The effectiveness of health education with snakes and ladders method on adolescent knowledge about the impact of child marriage at SMPN 2 Gunungkidul Yogyakarta. *Caring: Jurnal Keperawatan* 2019;8(2):68-76. Available from: <https://www.e-journal.poltekkesjogja.ac.id/index.php/caring/article/download/524/353/> [Last accessed on 2020 Aug 20].
- Zakiyyah M, Natalia MS, Ekasari T. The influence of emo demo against provision of complementary feeding. ????. 2020;7(1):42-7. Available from: <https://www.journal.ibrahimy.ac.id/index.php/oksitosin/article/download/536/613/> [Last accessed on 2020 Aug 20].
- Aunger R, Curtis V. Behaviour centred design: Towards an applied science of behaviour change. *Health Psychol Rev*. 2016;10(4):425-46. <http://dx.doi.org/10.1080/17437199.2016.1219673> PMID:27535821
- Amareta DI, Ardianto ET. Improving the practice of washing hands with soap for school age children using the Emo Demo method. *Kesehatan*. 2017;9(2):88-93. Available from: [https://www.researchgate.net/profile/Efri-Ardianto/publication/338670507\\_Peningkatan\\_Praktik\\_Cuci\\_Tangan\\_Pakai\\_Sabun\\_pada\\_Anak\\_Usia\\_Sekolah\\_dengan\\_Metoda\\_Emo\\_Demo/links/5e22c76c458515ba208fc4c/Peningkatan-Praktik-Cuci-Tangan-Pakai-Sabun-pada-Anak-Usia-Se.](https://www.researchgate.net/profile/Efri-Ardianto/publication/338670507_Peningkatan_Praktik_Cuci_Tangan_Pakai_Sabun_pada_Anak_Usia_Sekolah_dengan_Metoda_Emo_Demo/links/5e22c76c458515ba208fc4c/Peningkatan-Praktik-Cuci-Tangan-Pakai-Sabun-pada-Anak-Usia-Se.) [Last accessed on 2020 NoV 20].