

## Education to Prevent Early Marriage in Teenagers Using The Snake and Ladder Game

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### ABSTRACT

One of the social problems that exist in Indonesia is early marriage. In 2022, approximately 52 thousand cases of marriage dispensation submitted to the religious courts. One of contribute factor is reproductive health education to teenagers. This research aims to increase teenagers' insight into the dangers of early marriage for reproductive health. Using the Snakes and Ladders game, this study used a one-group pre-post-test design to increase teenagers' knowledge about early marriage. The sample of this research was 29 teenagers aged 12-13 years. Data collection was carried out in May 2023. The level of knowledge was measured using a questionnaire and t-test. The results of the level of knowledge before and after showed an increase in teenagers' knowledge of the dangers of early marriage for reproductive health. After data analysis was carried out The results show a significant difference between before being given education and after being given education regarding the dangers of early marriage in teenagers. The use of the snakes and ladders game can be used as an alternative medium in providing reproductive health education to prevent early marriage.

**Keywords**—Reproductive Health, Early Marriage, Learning Media, Snake and ladder game.

### INTRODUCTION

Indonesia is a country that has many social problems that occur in society and increase every year. These social problems will have an impact on the quality of human resources in Indonesia. One of the social problems whose numbers are currently continuing to increase is early marriage. Early marriage is a marriage that takes place for children under the productive age, namely under 21 years (Priohutomo, 2018).

Early marriages in Indonesia are still often found in various parts of provinces. Child marriage in Indonesia is estimated at around 10.5 percent every year. In 2022, approximately 52 thousand cases of marriage dispensation submitted to the religious courts (Budianto, 2024). One occurred in the Ponorogo area of East Java in mid-January 2023, where 125 early marriages were granted by the Ponorogo Religious Court on the grounds of pregnancy out of wedlock and giving birth. Based on Data from the Central Statistic Board in 2020, The Proportion of women aged 20-24 years who Are Married or Living Together Before the Age of 18 by Province (Percent) in West Sumatra was 5.03 percent. The following year saw a decrease of 1.55 percent, but in 2022, the percentage increased to 3.48, an increase of 0.14 percent from the previous year. On a Nationwide Scale, the percentage of early marriage in Indonesia decreased yearly from 2020 to 2022 (BPS, 2023).

Early marriage is the marriage of males and females under the age of productivity. Several factors cause early marriage, including lack of education, promiscuous sexual behavior, marriage arranged by parents or guardians, cultural practices, unwanted pregnancy, economic conditions, etc. Early marriage correlates to the incidence of teenage pregnancy. Some of the teenagers who are married planned their pregnancies. The were studies showed that women who married under 20 years were high risk pregnancy than women who married at age >20 years (Gamelia, 2021 ; Sari, 2014). The risks of early marriage will also have an impact on the health of the mother and fetus during pregnancy and delivery. The risk of early pregnancy and childbirth could affect the physical and psychological health of the mother and child, as well as early marriage causing a higher risk of death than adult marriage (Priohutomo, 2018).

Many educational instruments have begun to be developed in the form of games. One game that is familiar and has been used in various educational fields is the snakes and ladders game. The characteristics of the game are that it is interesting and can be played easily in groups which are the advantages of the game. One of the studies on dental and oral health education using snakes and ladders was proven to be effective in perceiving knowledge, attitudes and practices regarding dental and oral health in children (Hamdalah, 2013).

In this era of globalization, teenagers are very easy to access and vulnerable to the influence of globalization itself. So games like snakes and ladders are needed which are not only a means of entertainment, but can also be a means of education and information for teenagers. This research aims to increase teenagers' insight into the dangers of early marriage for reproductive health using learning media in the form of the Snake and Ladder Game. The role of this learning media is to help teenagers become more aware of the risks of early marriage, pregnancy, and childbirth.

## METHOD

This study used quasy experiment with one group pre-post test design. One group pre-post test is experimental research carried out on only one group that is selected randomly and no stability and clarity tests are carried out on the group's condition before being given treatment. It consists of the The research was conducted on May 31, 2023, at MTsN 6 Padang. The samples were students of MTsN 6 Padang. The sampling technique used purposive sampling as many as 29 students. The respondents had given the education about prevention of early marriage for reproductive health using the Snake and Ladder Game. The understanding of the students was measured using online questionnaire with multiple choice. Data were collected by filling in a questionnaire before and after given the treatment. with the same questions. Data from the pre-post test results and exercises done by students were then analyzed statistically. Results of pre-post test analysis with the Wilcoxon test and gain score.

## RESULTS AND DISCUSSIONS

### Product Description

This game consists of a snakes and ladders board containing questions and statements about early marriage and reproductive health, This game consists of a snakes and ladders board containing questions and statements about early marriage and reproductive health, dice, and information cards. For 1 round of the game, there are 5 participants, each round lasts 10 minutes.

### Data Analysis

The analysis of pre-post test scores was in the table below.

**Table 1.** Analysis of Pre-post test scores

Evaluation scores	Pre-test	Post-test	p-value*
- n	29	29	
- mean	43.10	77.24	
- minimum	10	70	<0,001
- maximum	60	90	

\* Wilcoxon test

Based on the data above was found mean in the pre-test was 43.10. While on post scores, the class average is 77.24. Wilcoxon test results showed a significant difference in student scores at the pre-test and the post-test. The scores obtained by students at the post-test were higher than the

scores at the pre-test. The results indicate an influence on the implementation (treatment) carried out.

The next step is to see how the impact of implementation is based on the data above, calculating the normalized Gain score based on the formula according to Archambault. The test is to show the effectiveness of Early Marriage Prevention Education for Adolescents with the Snakes and Ladders Game, which uses manual calculations, namely the N-Gain effectiveness formula. Normalized gain test (N-Gain). The N-Gain calculation according to Hake measures the extent to which the target has been achieved from the start before treatment begins (using a pretest) and what are the results after treatment (using a posttest). Using the formula the N-gain score in percent form is 58.9%. The results of the normalized gain calculation are then interpreted based on the n-gain interpretation table according to Hake.

**Table 2.** Categories According to Hake

Percentage (%)	Interpretation
<40	Ineffective
41-55	Less effective
56-75	Quite effective
>76	Effective

From the category according to Hake, the N-Gain score was found to be in the range of 56-75%, meaning that the research carried out on the variables was Quite Effective.

The use of snakes and ladders can improve cognitive abilities for students (Amin, 2020; Oktaviani, 2022). Another study on junior high school students, which showed positive results from using the snakes and ladders game. Apart from increasing knowledge, games in learning also improve students' speaking abilities. Students become more creative and actively express ideas (Suryani, 2014).

The results of the research show that education to prevent teenage marriages using the snakes and ladders game shows a significant and effective influence on students and this education is quite effective for students in class VII.9 MTsN 6 Padang. The use of the educational snakes and ladders game can make teenagers more aware of the risks of early marriage which not only have an impact on physical health but also psychologically due to physical and mental unpreparedness to marry at an early age. This game can increase adolescent awareness and also adolescent knowledge regarding the risks and consequences of early marriage.

The use of the reproductive health game snakes and ladders has an influence on teenagers' attitudes in efforts to prevent premarital sex at SMA Negeri 1 Parepare (Risna, 2020). Similar research also states that counseling methods and snakes and ladders games can be an alternative for health education for teenagers. The research results showed that 80 percent of students were able to answer correctly questions regarding the meaning, causes, impacts and strategies for preventing child marriage (Elmanora, 2024). Other research that also supports states that there is an influence of health education using the snakes and ladders playing method on teenagers' knowledge about the impact of child marriage (Handayani, 2019).

Adolescents are a potential group that needs to be given serious attention because adolescents are considered a group that has sexual and reproductive health risks where they have a great sense of curiosity and want to try something new (Musthofa et al, 2010). Age 12-13 years is early adolescence. During this period, there are many changes that will have an impact on reproductive health if teenagers are not prepared thoroughly. Changes experienced by early

adolescents include feeling closer to their peers, feeling like they want to be free, paying more attention to their body and starting to think imaginatively (Rahmadayanti et al, 2023).

Increasing self-efficacy is needed in efforts to prevent teenage marriage. One method that can be used to increase self-efficacy is through playing snakes and ladders. The snakes and ladders game can increase teenagers' knowledge and understanding about healthy sexual behavior and the risks of teenage marriage on reproductive health. Similar research also states that playing snakes and ladders can emphasize teenagers' knowledge and attitudes towards reproductive health (Sari et al, 2022).

## CONCLUSION

The results of the data analysis above concluded that the education on the prevention of teenage marriage using the game of snakes and ladders shows a significant and effective effect on students and this education is effective enough for students in class VII.9 from MTsN 6 Padang. Using the educational snakes and ladders game can make teenagers more aware of the risks of early marriage which not only have an impact on physical health but also psychological ones due to physical and mental unpreparedness to marry at an early age. The Snakes and Ladders game has benefits as entertainment and can increase the spirit of socialization in teenagers. This game can increase teenagers awareness and also teenagers knowledge of the risks and consequences of early marriage.

## REFERENCES

- Amin, M, et al. 2020. *Increase of Students Science Cognitive Using Snake Ladder Media*. Journal of Primary Education. 9 (1) : 68-74. <https://journal.unnes.ac.id/sju/jpe/article/view/28754>
- Badan Pusat Statistik. 2023. *Proporsi Perempuan umur 20-24 Tahun yang Berstatus Kawin Atau Berstatus Hidup Bersama Sebelum Umur 18 Tahun Menurut Provinsi*. <https://www.bps.go.id/id/indicator/40/1360/1/proporsi-perempuan-umur-20-24-tahun-yang-berstatus-kawin-atau-berstatus-hidup-bersama-sebelum-umur-18-tahun-menurut-provinsi.html>
- Budianto, Yoeseff. 2024. *Tingginya Perkawinan Usia Anak di Indonesia*. Kompas. <https://www.kompas.id/baca/riset/2024/03/08/tingginya-angka-perkawinan-usia-anak-di-indonesia>
- Elmanora., Septiana, Anisya., Afifah, Lu'lu Fadiyah., Caherani, Rhesna Sagita., Deviyani, Tya. 2024. *Edukasi Pencegahan Child Marriage Pada Remaja Melalui Kegiatan Penyuluhan dan Permainan Ular Tangga*. Jukeshum. 4 (1). <https://ojs.unhaj.ac.id/index.php/jukeshum/article/view/801/539>
- Fitrianiingsih, R. & Musdalifah. 2015. *Efektivitas Penggunaan Media Video pada Pembelajaran Pembuatan Strapless Siswa Kelas XII SMK Negeri 1 Jambu*. Fash. Fash. Educ. J. 4. <https://journal.unnes.ac.id/sju/index.php/ffe/article/view/7793>
- Gamelia, E., Kesehatan, A. K.-K. J., & 2017, U. (n.d.). *Determinant Of Teenage Pregnancies*. Journal.Unnes.Ac.Id. Retrieved July 13, 2021, from <https://journal.unnes.ac.id/nju/index.php/kemas/article/view/7380>
- Hamdalah, A. 2013. *Efektivitas Media Cerita Bergambar dan Ular Tangga dalam Pendidikan Kesehatan Gigi dan Mulut Siswa SDN 2 Patrang Kabupaten Jember*. Jurnal Promkes. 1(2), 118–123. <https://www.e-jurnal.com/2014/11/efektivitas-media-cerita-bergambar-dan.html>
- Handayani, Sri., Monika, Rika., Pipit, Priska. 2019. *Efektivitas Penkes Dengan Metode Ular Tangga Terhadap Pengetahuan Remaja Tentang Dampak Perkawinan Anak di SMPN 2 Gunungkidul Yogyakarta*. Caring. 8 (2). <https://e-journal.poltekkesjogja.ac.id/index.php/caring/article/view/524/353>

- Musthofa, Syamsulhuda Budi., Winarti, Puji. 2010. Faktor Yang Mempengaruhi Perilaku Seks Pranikah Mahasiswa di Pekalongan Tahun 2009-2010. *Jurnal Kesehatan Reproduksi*. 1 (1). <https://www.neliti.com/id/publications/105191/faktor-yang-mempengaruhi-perilaku-seks-pranikah-mahasiswa-di-pekalongan-tahun-20>
- Oktaviani, et al. 2022. *Analysis of Students' Learning Ability in Educational Innovation Assisted by Noe-Snake and Ladder Game Learning Media in the Society 5.0 Era*. *Teknodika*. 20 (2). <https://jurnal.uns.ac.id/Teknodika/article/view/65917>
- Priohutomo, S. 2018. *Mencegah Pernikahan Anak Melalui Program KKBPK*. BKKBN: Banjarmasin.
- Rahmadayanti, Ade Marlisa., Apriyani, Titin., Sari, Sagita Darma., Anggeriani, Rini. 2023. *Asuhan Kebidanan Pada Remaja dan Primenopause*. CV Putra Penuntun Palembang: Palembang.
- Risna, R., Usman., Rusman, Ayu Dwi Putri. 2020. Pengaruh Perminan Ular Tangga Kesehatan Reproduksi Terhadap Sikap Remaja Dalam Upaya Pencegahan Seks Pranikah di SMA Negeri 1 Parepare. *Manusia dan Kesehatan*. 3 (2). <https://jurnal.umpar.ac.id/index.php/makes/article/view/292>
- Sari, D. 2014. *Factors Related to Pregnancy at Adolescent Age at Ciputat Health Center, South Tangerang City in 2014*. *ARKESMAS*, 1(1). <http://journal.uhamka.ac.id/index.php/arkesmas/article/view/85/49>
- Sari, Novi Wulan., Yuniliza., Rovendra, Erit. 2022. Pengaruh Edukasi Dengan Media Ular Tangga Terhadap Pengetahuan dan Sikap Remaja Tentang Kesehatan Reproduksi. *J-HESTECH*. 5 (2). [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwja9e2ih\\_yEAXWu-zgGHREPAbkQFnoECCEQAQ&url=https%3A%2F%2Fjournal.unitomo.ac.id%2Findex.php%2Fjhest%2Farticle%2Fview%2F4559%2F2383&usg=AOvVaw3tXJDJ36lxgqb6EItG0YPT&opi=89978449](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwja9e2ih_yEAXWu-zgGHREPAbkQFnoECCEQAQ&url=https%3A%2F%2Fjournal.unitomo.ac.id%2Findex.php%2Fjhest%2Farticle%2Fview%2F4559%2F2383&usg=AOvVaw3tXJDJ36lxgqb6EItG0YPT&opi=89978449)
- Suryani, A. & Rosa, RN. 2014. *Using Board Game "Snake and Ladder" in Teaching Speaking at Junior High School*. *JELT*. 2 (2). <https://ejournal.unp.ac.id/index.php/jelt/article/view/3701/2938>