



The Effect of Providing Counseling on Knowledge About Safety Houses in Housewives Neighborhood Association of 23 Bagan Pete Village, Jambi City

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<p>Track Record Article</p> <p>Accepted: 28 February 2023 Revised: 14 March 2023 Published: 28 March 2023</p> <p>How to cite: Aswin, B., & Hidayati, F. (2023). The Effect of Providing Counseling on Knowledge About Safety Houses in Housewives Neighborhood Association of 23 Bagan Pete Village, Jambi City. <i>Contagion: Scientific Periodical Journal of Public Health and Coastal Health</i>, 5(1), 234-243.</p>	<p style="text-align: center;">Abstract</p> <p><i>Potential hazard is a state or condition in a process, machine, tool, material or way of working which in an intrinsic (natural) sense can cause injury, injury, even further, namely loss of worker's life and can damage tools and the environment. The house where we live is a place that is often considered the safest and most comfortable place for us. But without us knowing it, the house is also potentially dangerous. Therefore, it is necessary to understand and be aware of the safety house for every household in minimizing the risk of work accidents that occur in the house. The purpose of this study was to analyze the effect of providing counseling on knowledge about safety houses in housewives at neighborhood association of 23, Bagan Pete Village, Jambi City. This research is a quantitative study using a quasi-experimental one group pretest-posttest design. The research population was all housewives in neighborhood association of 23. The research samples were 30 housewives using the purposive sampling technique. Methods of data collection through interviews using a questionnaire. Data analysis was carried out using univariate and bivariate. Bivariate analysis uses the paired T-test if the data distribution is normal, otherwise if the data distribution is free then the Wilcoxon test is used. Analysis of the data in this study used the IBM SPSS 20 application. The results of the statistical analysis showed that counseling had an effect on knowledge about safety houses ($p=0.000 < 0.05$). The conclusion is that there is an influence of counseling on knowledge about safety house among housewives in neighborhood association of 23, Bagan Pete Jambi.</i></p> <p>Keyword: Counseling, Knowledge, Safety House</p>
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INTRODUCTION

Potential trial hazard is a state or condition in a process, machine, tool, material or way of woodworking in which an intrinsic (natural) sense can cause injury, injury, even further, namely loss of a worker's life and being able to damage tools and the environment (Panjaitan, 2017). Occupational safety and health protection (OHS) that is implemented in the workplace has becomes an asset for individuals, society, and the country itself because work safety must protect workers carrying out work so that they are not exposed to the effects of hazards and potential hazards from work. This protection also plays a role in minimizing and even preventing unforeseen bad conditions that you don't want to happen (Dahyar, 2014).

When carrying out work activities, of course, employees use a lot of work equipment. Hazard factors related to work equipment include damage to the work equipment used.

Companies/industries including households use machines, electronic equipment, and kitchen equipment which can have a bad effect on those who use them if there is no understanding of OHS (Sumarna et al., 2018). Occupational health and safety (OHS) is an important aspect of people's lives. Work safety procedures must be carried out by K3 Law No. 1 of 1970 which regulates work safety, including the field of environmental hazards, where activities/operations that require human assistance are carried out. Occupational health and safety are also regulated in PP No. 50 of 2012 which regulates the plans, responsibilities, implementation, procedures, process and resources needed. Develop, implement, evaluate, and maintain occupational health and safety policies related to risk management in work activities to create a safe, efficient, and productive workplace (PP, 2012).

Home is often considered the safest and most comfortable place for us. Everyone certainly thinks home is the safest place. But unbeknownst to us, the house can also pose a danger when the occupants move there. Domestic hazards and risks such as fire, food poisoning, dangerous goods, accidents, etc. K3 knowledge must be owned by all families who live at home, even though everyday housewives (IRT) and housemaids (PRT) are very important to raise awareness about safety management at home. Therefore, understanding and awareness regarding the safety of house is needed for every household in minimizing the risk of work accidents occurring in the house. In addition, problems with poor household management can also be seen in some homes, such as the untidy and inappropriate placement of kitchen utensils, for example, knives, which may trigger injuries to family members who are still children.

There are many potential hazards in the household environment which include physical, chemical, biological, ergonomic and psychological factors. Some potential hazards in households, such as lighting in rooms that do not meet health requirements, lifting and moving objects that exceed the required load and non-ergonomic work positions, insects and bacteria in certain areas of the house, use of household chemicals, less harmonious relationships between residents, and there are still many potential hazards in the household (Fahrurroji et al., 2020). The existence of these hazardous factors can affect the safety and health of the occupants of the house (Sultan, 2021). The provision of health education initiatives may boost a person's knowledge. The quantity of knowledge gained may be affected by the participants' attentiveness and how the material is presented (Tarigan et al., 2022). If the community environment can be managed properly, it will be an effective vehicle to shape environmental

care behavior in the community so that the community environment can become a pioneer of an environmentally friendly lifestyle (Irawati & Budianingsih, 2016).

In addition, other risks include poisoning or death due to procedural errors in using chemicals, skin allergies and asthma due to house dust, injuries or broken bones due to disputes between householders, and other risks (Pamungkas et al., 2021). Lack of knowledge and public perceptions about OSH has an impact on poor OSH behavior. For example, when the activity of lifting and moving the refrigerator is not ergonomic, causing complaints of back pain or MSDs. In addition, the use of personal protective equipment (PPE) which is still lacking in activities using equipment such as knives, neglect to use respiratory protection such as masks when picking up or disposing of garbage. Availability of sufficient information about OSH behavior in the household environment can provide a first step for parties concerned about OSH issues at the household level. In addition, the occupants of the house are able to identify potential hazards that are usually found in the home environment and can then carry out appropriate hazard control efforts at the household level. A house that is free from potential hazards of accidents and disease has a good impact on the residents of the house remaining healthy and productive (Casban et al., 2020; Dewanti et al., 2018).

Alam Barajo sub-district is the 3rd largest sub-district in Jambi City, which has 206 RTs spread across 5 sub-districts, one of which is RT 23, Bagan Pete Sub-District. The problems found in RT 23, Bagan Pete Village, are the low awareness and understanding of housewives about OSH and not applying OSH principles in carrying out activities at home. Besides that, problems with poor household management were also seen in several houses, such as the untidy and inappropriate placement of kitchen utensils, for example, knives, which could trigger injuries to family members who are still children. Therefore, comprehensive efforts are needed to address the risk of OSH problems and work accidents at home for housewives and this can also affect their family members, considering that this can also have an impact on the surrounding community, for example, if there is a fire hazard. Therefore, problems regarding safety in residential homes should not be underestimated because they can pose a risk to public health as a whole. The purpose of this study was to find out how the influence of counseling on knowledge about safety houses for housewives in RT 23, Bagan Pete Village, Jambi.

METHODS

This research is a quantitative study using a quasi-experimental one-group pretest-posttest design. The research subjects were 30 housewives in RT 23, Bagan Pete Jambi Village.

Methods of data collection through interviews using a questionnaire. The instrument in this study used a questionnaire, with the results of the validity test showing an r-value of 0.860 – 0.870 and out of 20 items 18 were declared valid. The reliable value of the research questionnaire showed a Cronbach alpha value of 0.876, so it was declared reliable. The analysis in this study used IBM SPSS 20. Data analysis was performed univariate and bivariate. Bivariate analysis uses paired T-test if the data is normally distributed, but if the data is freely distributed then the Wilcoxon test is used at 95% confidence intervals. Where the variable is said to be related if the value of $p < \alpha$ (0.05) (Lapau, 2013).

RESULTS

RT 23 Bagan Pete Village is one of the Neighborhood Units in the Alam Barajo Jambi sub-district. The sample in this study was 30 housewives. The majority of housewives do not work but only as housewives, but awareness of the importance of implementing OSH in the home environment (safety house) or in carrying out daily activities is still low. The characteristics of housewives in RT 23 Bagan Pete can be seen in the results of the univariate analysis as follows:

Description of research variables

Table 1. Frequency Distribution of Research Variables

Variable	category	n	%
1. Age	27-34 years	19	63,3
	35-42 years	11	36,7
2. Education	SMA	25	83,3
	University	5	16,7
3. Job	Work	7	23,3
	Does not work	23	76,7

Based on table 1, it can be seen that the majority of respondents are in the range of 27-34 years with a proportion of 63.3%, and 11 respondents aged 35-42 years with a proportion of 36.7%. The last level of education of the respondents was 83.3% at the high school level (SMA) and another 16.7% at the higher education level. And from 30 respondents, 76.7% of housewives do not work and the other 23.3% have jobs outside the home.

To find out which test to use, for the first we must check the distribution of the data. The results of the data normality test are presented in the following table:

Table 2. The results of normality test

Shapiro-Wilk			
	Statistic	df	Signifikan
Before	0,915	30	0,019
After	0,559	30	P<0,001

The results of the normality test using the Shapiro-Wilk test obtained a p-value for prior knowledge of 0.019 and knowledge after <0.001, then the data distribution is not normal and the Wilcoxon test will then be used.

Table 3. Numerical data results of pre-test and post-test results

Variable	Mean	Std. Deviation	Minimum value	Maximum value
Pre-test	10,00	5,64	1	18
Post-test	18,00	1,26	15	20

Based on the results of the analysis above, it can be seen that there was an increase in the average value of the level of knowledge before and after obtaining counseling and training materials from 10.00 to 18.00.

Table 4. Wilcoxon Test Results Knowledge of safety houses in residential homes

	n	Median (minimum-maksimum)	Average±s.d	Signifikan
Before	30	12,5 (1,0-18,0)	10±5,64	P<0,001
After	30	18,0 (15,0-20,0)	18±1,26	

Based on Table 4, it can be seen that the average pre-test value is 10 with a standard deviation of 5.64, while the average post-test value is 18 with a standard deviation of 1.26 and the Wilcoxon test results obtained a significant value of 0.000 <0.05, which means that there is an influence of counseling and socialization on knowledge about safety house. Apart from being given counseling, housewives also received simple safety house training, namely handling gas cylinder leaks that emit fire.

DISCUSSION

The results of statistical analysis obtained a p-value of 0.000 <0.05 which means that there is an influence of counseling on knowledge about safe houses among housewives in RT 23, Bagan Pete Village, Jambi. Health and safety are important aspects of human life, both at work and in everyday life. The house where we live is a place that is often considered the safest and most comfortable place for us. But without us realizing it, the house also has the potential

to be a source of danger for its residents when carrying out activities in it. a housewife or housemaid has a high risk of activities such as activities in the kitchen with gas cylinders, fire from a burning stove, hot oil, electric-powered household appliances, chemicals used when cleaning the bathroom, washing, insect repellent, and others.

Before counseling, the knowledge of housewives regarding safety in the home environment was still very common, as evidenced by the low awareness of the dangers and risks in the home, such as fire, food poisoning, hazardous substances, slipping in the bathroom, accidents, and so on. Housewives have an important role in activities within the home so safety house counseling needs to be carried out so that housewives can supervise and be able to carry out occupational health and safety management in the home environment (Ekawandani et al., 2019).

Knowledge is the result of human sensing or the result of knowing someone about an object through the five senses they have. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste, and touch. The capture of knowledge imparted through the sense of sight is 75% - 87%, through the sense of hearing is 13%, and 12% from other senses (Sulandari et al., 2020). Thus, media counseling is the right method to increase knowledge about safety houses for housewives. This is evidenced by the results of the Wilcoxon test where the p-value <0.05 indicates the effect of counseling on increasing the knowledge of housewives regarding safety houses. In the counseling series, it can be seen that there are many housewives' complaints or worries about home safety, such as leaking gas cylinders, slipping in the bathroom, tripping, and so on, which at first were considered normal by housewives. After counseling related to house safety, there was an increase in the knowledge of housewives regarding home safety from an average initial knowledge value of 12.5 to 18.0.

This research is in line with the research of Mahani and Petriana (2019) which found that there was an effect of occupational health and safety counseling on the level of fishermen's knowledge as evidenced by the results of the Wilcoxon test with a p-value of $0.000 <0.05$, which means H_0 is rejected. Through counseling, it is possible to increase fishermen's knowledge related to occupational health and safety. Prior to counseling, the average value of fishermen's knowledge was only 4.49 and increased to 8.21 after counseling related to occupational health and safety. In addition to increasing knowledge, the counseling media is also able to influence fishermen's attitudes toward occupational safety and health (Ngidiho & Mahmud, 2018).

Eka et al (2021) also found something similar, namely that there was an effect on increasing knowledge. In their research, Eka et al observed a change in knowledge regarding the use of personal protective equipment (PPE) among citrus farmers in Kuok Pulau Jambu Village. The Wilcoxon test results obtained a p-value of $0.000 < 0.05$. The results of the pre-test and post-test showed that before counseling and being given a pre-test, 48.9% of farmers had poor knowledge. After counseling and being given a posttest, the percentage of respondents whose knowledge was not good decreased to 17.8%. There was an increase in the knowledge of respondents who before counseling and were given a pretest 51.1% of respondents who had good knowledge had a small difference with respondents who had less knowledge about the use of PPE when spraying pesticides. After counseling and being given a posttest, the percentage of respondents with good knowledge increased to 82.2% (Syafriani & Saputri, 2019).

According to Edward (2022) in general, the hazards that exist and often occur in residential homes are falls, fires, exposure to low carbon monoxide, choking, cuts, poisoning, choking, drowning and burns either caused by splashing hot oil during cooking or burns from the explosion hazard of gas cylinders. These hazards generally occur due to carelessness and lack of awareness about danger (Arminas, 2016). According to Krieger and Jacobs (2011) that understanding, identifying, and eliminating hazards that may exist in residential homes can protect the health and safety of the family (Krieger & Jacobs, 2011). Ikram et al 2022 stated that based on the implementation of zero accident training activities through education based on occupational health and safety (OHS) in the household environment, the results obtained from the pre- and post-tests showed an increase in community knowledge of 9.38% (Hardi et al., 2022).

This research is also in line with several studies below which state that work accidents in the household environment can be influenced by various factors, including a lack of understanding of OSH (Mulyani et al., 2019). In carrying out daily work, for example, when washing and ironing clothes, perceptions are still not good in safe behavior when sewing (Wijaya et al., 2019). Lack of knowledge and public perceptions about OSH has an impact on poor OSH behavior. For example when the activity of lifting and moving the refrigerator is not ergonomic, causing complaints of back pain or MSDs (Arminas, 2016). In addition, the use of personal protective equipment (PPE) is still lacking in activities using equipment such as knives (Rudyarti, 2017). The activity of serving food and drinks at home for breakfast, lunch and dinner can also be at risk of being scratched or injured by sharp objects, MSDs complaints

because work stations are not ergonomic, splashed with water and hot food. Control of these hazards can be done by replacing and maintaining the cooking utensils used (Braglia et al., 2018). Fire incidents in households from the use of gas chemicals can be caused by the user's ignorance of the dangers that will occur and errors in their use (Harjanto et al., 2011). Therefore, efforts to control hazards are needed, such as cleaning the yard, floors, walls and ceilings of the house regularly, opening or closing the doors and windows of the house if necessary, providing sufficient house ventilation, and training in safety behavior, especially safety using LPG gas cylinders at home (Suryanto et al., 2016).

According to the researchers' assumptions, from the research results, it is known that after being given the post-test, almost all housewives experience an increase in knowledge. So it can be seen that the counseling method with simple training related to safety houses affects changing the knowledge of housewives. Housewives begin to know the risks and dangers that exist in the home environment and ways to avoid hazards in the home environment. Whereas for some respondents knowledge was still not good after the intervention was carried out, because the respondents could not digest the information and lacked focus when delivering the material.

CONCLUSIONS

The conclusion obtained is that the knowledge of housewives in neighborhood association of 23, Bagan Pete Jambi Village is still quite common regarding safety in the home environment. After the intervention was carried out with simple counseling and training related to safety houses, there was an increase in the knowledge of housewives regarding safety in the home environment. Housewives have started to know the potential hazards that can arise in the home environment and already know how to overcome and prevent hazards or risks that can threaten safety at home.

REFERENCE

- Arminas. (2016). Perancangan Fasilitas Kerja dan Perbaikan Postur Kerja pada Aktivitas Manual Material Handling Karyawan Toko Mega Mas Elektronik Makassar. *J Ergon Dan K3*.
- Braglia, M., Di Donato, L., Gabbrielli, R., & Marrazzini, L. (2018). The house of safety: A novel method for risk assessment including human misbehaviour. *Saf Sci*. <https://doi.org/10.1371/journal.pone.0253827>
- Casban, Marfuah, U., Sunardi, D., & Dewi, A. P. (2020). *Evaluasi Pelatihan Pencegahan dan Penanggulangan Kebakaran di Lingkungan Rumah Tangga*. 3, 470–478.

- Dahyar, C. P. (2014). Perilaku Penggunaan Alat Pelindung Diri Pada Pekerja PT X. *Jurnal Promosi Kesehatan*, 6(3), 178–187.
- Dewanti, N. A. Y., Sulistiyani, Setyaningsih, Y., & Jayanti, S. (2018). Faktor Risiko Bahaya Tempat Kerja dan Lingkungan Rumah terhadap Kesehatan Home-based Worker di Kota Semarang. *Jurnal Kesehatan Lingkungan Indonesia*, 17(1), 52–58.
- Ekawandani, N., Faujiah, F., & Rum, A. I. (2019). Sosialisasi dan Pelatihan Safety House di Kecamatan Cibogo Kabupaten Subang Provinsi Jawa Barat. *Jurnal Pengabdian Kepada Masyarakat (Abdimas)*, 02(02), 73–81.
- Fahrurroji, A., Wicaksono, A., Fauzan, S., Fitriangga, A., Fahdi, F. K., & Nurbaeti, S. N. (2020). Penanganan Bantuan Hidup Dasar (BHD) dan Kesehatan dan Keselamatan Kerja (K3) Lingkungan Rumah Tangga. 26(1), 47–52.
- Hardi, I., Rusydi, A. R., Haeruddin, & Ahri, R. A. (2022). Pelatihan Zero Accident Melalui Edukasi Berbasis Kesehatan dan Keselamatan kerja (K3) di Lingkungan Rumah Tangga pada Ibu PKK Desa Sanrobone Kecamatan Sanrobone Kabupaten Takalar. 3(3), 2048–2052.
- Harjanto, N. T., Suliyanto, & Sukei I, E. (2011). Manajemen Bahan Kimia Berbahaya Dan Beracun Sebagai Upaya Keselamatan Dan Kesehatan Kerja Serta Perlindungan Lingkungan. 08, 54–67.
- Irawati, M. H., & Budianingsih, E. (2016). Penerapan Program Kawasan Rumah Pangan Lestari Dan. *Seminar Nasional Pendidikan Dan Saintek*, 1, 697–701.
- Krieger, J., & Jacobs, D. (2011). Healthy Homes. *Making Healthy Places*, 170–187.
- Lapau. (2013). *Metodologi Penelitian*. Yayasan Pustaka Obot Indonesia.
- Mulyani, Y., Gardiarini, P., & Karim, S. (2019). Penerapan Kesehatan Keselamatan Kerja (K3) Di UMKM Laundry Balikpapan. *Jurnal Pengabdian Nusantara*, 2(2), 122–128.
- Ngidiho, M., & Mahmud, P. E. (2018). Pengaruh penyuluhan Kesehatan dan Keselamatan Kerja terhadap Tingkat Pengetahuan dan Sikap Nelayan di Desa Hative Besar. *PAsapua Health Journal*, 1(2), 66–70.
- Pamungkas, M. P., Sari, R. P., Wardany, K., & Mariana, E. (2021). Sosialisasi Dasar Teknik Instalasi Listrik Rumah Tangga di Kelurahan Kecamatan Trimurjo. *Jurnal Abdimas (Journal of Community Service)*, 3(2), 41–48. <https://doi.org/10.36312/sasambo.v3i2.394>
- Panjaitan, N. (2017). Bahaya Kerja Pengolahan RSS (Ribbed Smoke Sheet) Menggunakan Metode Hazard Identification and Risk Assessment di PT PQR. *Jurnal Sistem Teknik Industri*, 19(2), 50–57.
- PP. (2012). *PP No 50 Tahun 2012 Tentang Penerapan SMK3* (pp. 1–80).
- Rudyarti, E. (2017). Hubungan Pengetahuan Keselamatan Dan Kesehatan Kerja Dan Sikap Penggunaan Alat Pelindung Diri Dengan Kejadian Kecelakaan Kerja Pada Pengrajin Pisau Batik Di PT. X. *Journal of Industrial Hygiene and Occupational Health*, 2(1), 31–43.
- Sulandari, C., Dewi, A., & Mustikowati, T. (2020). Hubungan Tingkat Pengetahuan tentang Personal Hygiene Terhadap Performa Personal Hygiene Siswa. *Binawan Student Journal*, 2(3), 333–340.
- Sultan, M. (2021). Perilaku Pengendalian Bahaya Kecelakaan Kerja di Rumah Tangga Pada Masyarakat Kota Samarinda. *Jurnal Kesehatan Dan Kedokteran*, 2(2), 82–90.
- Sumarna, U., Sumarni, N., & Rosidin, U. (2018). *Bahaya Kerja Serta Faktor-Faktor Yang Mempengaruhinya* (1st ed.). CV Budi Utama.
- Suryanto, Anam, A., & Andodo, C. (2016). Pencegahan Kecelakaan Kerja Berbasis Human and Technical Approach Di Purwokerto Utara. *Jurnal Kesmas Indonesia*, 80–91.
- Syafriani, & Saputri, E. (2019). Pengaruh Penyuluhan Terhadap Pengetahuan, Sikap dan Tindakan Petani Jeruk di Desa Kuok Pulau Jambu Terkait Penggunaan Alat Pelindung

- Diri (APD) dari Bahaya Pestisida. *Jurnal Kesehatan Masyarakat*, 3(2), 54–67.
- Tarigan, S. E., Adilah, R., Nurjannah, M., Hana, N., Sari, W., Azhari, M., Hafizah, R. Q., Edriani, M., Dalimunthe, M. I., Kesehatan, D., Deliserdang, K., Kesehatan, F., Universitas, M., Negeri, I., & Utara, S. (2022). Analysis of the Level of Knowledge of Sei Tuan Village Community Regarding Acute Respiratory Infection (ARI) Before and After Intervention. *Contagion : Scientific Periodical of Public Health and Coastal Health*, 4(2), 122–131.
- Wijaya, W., Rahayuningsih, S., & Komari, A. (2019). Tingkat Perilaku Aman Tenaga Kerja Bagian Jahit Dengan Menggunakan Metode Antecedent Behavior Consequence Di PT. Glow. *Jurnal Ilmiah Mahasiswa Teknik Industri Universitas*, 1(1), 34–43.