

## Social Support from Nursing Students to Their Mother in Implementation of BSE

Nehemia Simanjuntak, Ida Maryati, Valentina B.M.Lumbantobing

Faculty of Nursing, Universitas Padjadjaran, Bandung, Indonesia

Email: nehemiasimanjuntak4@gmail.com

### Abstract

*Breast cancer is one type of cancer in a woman with the highest incidence globally, including Indonesia. Early detection, such as breast self-examination (BSE), can find breast cancer early, thus can reduce mortality and morbidity. BSE behavior is influenced by many factors of social support. Social support can come from the community, health workers, friends, and families, such as parents, spouses, and children. This study aims to determine social support from nursing students to their mothers to implement breast self-examination (BSE). This study was a quantitative descriptive design. This study's population was active students of batch 2016 and 2017 of Nursing Faculty, Universitas Padjadjaran in Jatinangor, Garut, and Pangandaran region. The sampling method used a purposive sampling of 236 students of Nursing Faculty, Universitas Padjadjaran. The data was collected using a social support questionnaire about BSE. Data analysis was used univariate as follows frequency distribution and percentage. This study has three levels of social support: high, moderate, and low. The results showed that social support had a high level of 36.86% and a low level of 35.59%. Students had a high level of emotional support (40.25%), instrumental support (20.76%), information support (52.54%) and appraisal support (75.42%). The study has indicated that social support by nursing students had still low. This can be improved by changing perceptions and increasing awareness about BSE.*

**Keywords:** Breast self-examination (BSE); mothers; social support; students.

### Abstrak

Kanker payudara merupakan salah satu jenis kanker pada wanita dengan angka kejadian tertinggi secara global termasuk Indonesia. Deteksi dini, seperti pemeriksaan payudara sendiri (SADARI), merupakan salah satu teknik untuk menemukan kanker payudara secara dini sehingga diharapkan dapat menurunkan angka mortalitas dan morbiditas. Perilaku BSE dipengaruhi oleh banyak faktor, salah satunya yaitu dukungan sosial. Dukungan sosial dapat berasal dari masyarakat, petugas kesehatan, teman, dan keluarga seperti orang tua, pasangan, dan anak. Penelitian ini bertujuan untuk mengetahui bagaimana dukungan sosial mahasiswa keperawatan kepada ibunya dalam pelaksanaan pemeriksaan payudara sendiri (SADARI). Penelitian ini merupakan penelitian deskriptif kuantitatif. Populasi penelitian ini adalah mahasiswa aktif angkatan 2016 dan 2017 Fakultas Ilmu Keperawatan Universitas Padjadjaran di wilayah Jatinangor, Garut, dan Pangandaran. Metode pengambilan sampel menggunakan *purposive sampling* sebanyak 236 mahasiswa Fakultas Ilmu Keperawatan Universitas Padjadjaran. Pengumpulan data dilakukan dengan menggunakan kuesioner dukungan sosial tentang SADARI. Analisis data menggunakan univariat yang disajikan dalam bentuk distribusi frekuensi dan persentase. Studi ini memiliki tiga tingkat dukungan sosial: tinggi, sedang, dan rendah. Hasil penelitian menunjukkan bahwa dukungan sosial pada tingkat tinggi 36,86% dan tingkat rendah 35,59%. Mahasiswa memiliki dukungan tingkat tinggi pada dukungan emosional (40,25%), dukungan instrumental (20,76%), dukungan informasi (52,54%) dan dukungan penilaian (75,42%). Hasil penelitian menunjukkan bahwa dukungan sosial mahasiswa keperawatan masih rendah. Hal ini dapat ditingkatkan dengan mengubah persepsi dan meningkatkan kesadaran tentang SADARI.

**Kata kunci:** Pemeriksaan Payudara Sendiri (SADARI); ibu; dukungan sosial; mahasiswa

## **Introduction**

Breast cancer is one of the most frequently diagnosed cancer and the most mortality in women worldwide (International Agency for Research on Cancer [IARC], 2014). From 2012 to 2018, the incidence and mortality of breast cancer in the world has increased by 10% (IARC, 2013; IARC, 2018a). Breast cancer of women with end-stage is more common in developing countries (Rivera-Franco & Leon-Rodriguez, 2018). Indonesian Ministry of Health said that Indonesia is a developing country with a high incidence and mortality rate in breast cancer. From 2012 to 2018, the percentage of breast cancer incidence in Indonesia increased by 6% and mortality by 4% (Indonesian Ministry of Health, 2016; IARC, 2018b). IARC has reported that the average age of breast cancer incidence in Indonesia is around 40-50 years, and the average age of breast cancer mortality is about 15-20 years (IARC, 2018b). Women over 50 years are prone to breast cancer (Indonesian Ministry of Health, 2016).

The risk factors of breast cancer are frequent severe stress, regular consumption of alcohol, active or passive smoking, mothers who have children but not breastfed, mothers have a first child aged  $\geq 30$  years, use hormonal contraception for a long time and without doctor advice, and has a family history of breast cancer (Indonesian Ministry of Health, 2015). Breast cancer causes are unknown, but early detection behavior and adequate treatment can reduce the incidence and mortality rate (Indonesian Ministry of Health, 2016). The recommendation by Indonesian Ministry of Health that breast cancer can be detected by early detection such as clinical breast examination, mammography, and breast self-examination (Indonesian Ministry of Health, 2016).

Early detection by self is relatively inexpensive because it does not require technology and a doctor's action (Rivera-Franco & Leon-Rodriguez, 2018). Research in India said that breast self-examination (BSE) is early detection that can reduce morbidity and mortality rate (Rao, Gupta, Narang, Singh, & Siddharth, 2016). John Hopkins Medical Center (in the National Breast Cancer Foundation) said that forty percent of breast cancer had been detected and diagnosed who feel a lump in their breast. Research in Padang found that the implementation of BSE in mothers was still low (4.2%) (Wahyuni, Edison, & Harahap, 2015). The most critical parameters that encourage women to perform early detection behavior are social support, attitudes, stress coping, lifestyle, and motivation (Bashirian, Barati, Shoar, Mohammadi, & Dogonchi, 2019; Khazae-Pool et al., 2014).

Social support is an act of comfort, care, and assistance when needed, which is given to others so that they feel loved and appreciated (Sarafino & Smith, 2012). The categories of social support are emotional support, instrumental support, information support, and appraisal support (Sarafino, 1990). The primary and traditional social support source is from the family (Cheng et al., 2013).

Mother is prone to breast cancer. Mothers said they enjoy spending time with their young adult children (Vaterlaus, Beckert, & Schmitt-Wilson, 2019). Another study said 56% of children and mothers often chat, and 88% of mothers listen to their children and respect their opinions (Wahyuti & Leonita, 2016). In another study, 82% of mothers said that they would listen to the advice

about health from their children because they thought that children knew more than they did (Mosavel, 2009).

A preliminary study conducted on active students of Nursing Faculty, Universitas Padjadjaran, found that 92.2% knew breast cancer, 60% had breast cancer prevention behavior, and 79.7% knew about breast self-examination (BSE). They said that breast cancer prevention with social support is 100% important, which is one source of social support that comes from them as a child.

## Method

This research was a quantitative descriptive design that aims to determine social support from nursing students to their mother in the implementation of breast self-examination (BSE). There are four categories of social support: emotional support, information support, instrumental support, and appraisal support. This study's population was active students of batch 2016 and 2017 of Nursing Faculty, Universitas Padjadjaran in Jatinangor, Garut, and Pangandaran campus. The sampling method used a purposive sampling of 236 students of Nursing Faculty, Universitas Padjadjaran with inclusion criteria is mother who still alive. The data was collected using google forms with a social support questionnaire from Rima & Siska (2018) research, which consists of 17 questions and has been modified and tested for validity and reliability with helped by 30 students of the Nursing Faculty, Universitas Padjadjaran outside the research sample. The validity test results obtained valid results (0.394-0.882) and the reliability test results (0.881), which means the reliability is strong. Data analysis was used univariate as follows frequency distribution and percentage. This study has three levels of social support: high, moderate, and low.

## Result

### Respondents Characteristic

Respondents in the study were mostly students of batch 2017 (52.11%), Jatinangor campus (50%), female (88.98%), aged  $\geq 21$  years (75.82%) and dominant living with parents (74.15%). The source of information on BSE was more dominant from lecture in campus (46.2%) (Table 1).

**Table 1. Demographic Data of Nursing Students, Universitas Padjadjaran (n = 236)**

Characteristic	Frequency (f)	Percentage (%)
Batch		
2017	123	52,11
2016	113	47,88
Campus Regional		
Jatinangor	118	50
Garut	95	40,25
Pangandaran	23	9,74
Gender		
Male	26	11,01
Female	210	88,98
Age		
$\leq 20$ years	57	24,15

≥21 years	179	75,82
Residence Status		
With parents	175	74,15
Boarding houses/apartments	61	25,85
Source of Information about BSE		
Lecture in Campus	231	46,2
Medical Workers	62	12,4
Print Media	58	11,6
Social Media	145	29
Others (Website, Article, Counseling, Journal)	4	0,8

### Social Support Based on Demographic Characteristics

Social support based on demographic characteristics obtained high social support at the Garut campus (43.15%), female (39%), aged ≥21 years (37.43%) and living with parents (40.6%).

**Table 2. Social Support of Nursing Students, Universitas Padjadjaran Based on Demographic Characteristics (n<sub>total</sub> = 236)**

	Level of Social Support					
	High		Moderate		Low	
	f	%	f	%	f	%
Campus Regional						
Jatinangor	40	33,89	33	27,96	45	38,13
Garut	41	43,15	24	25,26	30	31,57
Pangandaran	9	39,13	8	34,78	6	26,08
Gender						
Male	5	19,23	11	42,3	10	38,46
Female	82	39	54	25,71	74	35,23
Residence Status						
With parents	71	40,6	50	28,6	54	30,85
Boarding houses/apartments	16	26,22	15	24,6	30	49,18
Usia						
≤20 years	20	35	14	24,56	23	40,35
≥21 years	67	37,43	51	28,49	61	34,1

### Social Support

Social support from nursing students to their mother in BSE implementation was 36.86% at high level.

**Table 3. Social Support of Nursing Students, Universitas Padjadjaran (n = 236)**

Level of Social Support	Frequency (f)	Percentage (%)
High	87	36,86
Moderate	65	27,54
Low	84	35,59

### Categories of Social Support

The categories of social support were found in appraisal support of 75.42%, information support of 52.54%, emotional support of 40.25%, and instrumental support of 20.76%.

**Table 4. Categories of Social Support of Nursing Students, Universitas Padjadjaran (n = 236)**

	Level of Social Support	Frequency (f)	Percentage (%)
Emotional	High	95	40,25
	Moderate	107	45,33
	Low	34	14,40
Instrumental	High	49	20,76
	Moderate	59	25
	Low	128	54,23
Information	High	124	52,54
	Moderate	44	18,64
	Low	68	28,81
Appraisal	High	178	75,42
	Moderate	54	22,88
	Low	4	1,69

## Discussion

### Social Support of Nursing Students to Their Mothers in Implementing BSE

The results of this study showed that 36.86% of nursing students had a high level of social support, but the difference was only 1.27% of nursing students with a low level of social support (35.59%) (Table 3). Social support with a high rank means that the student provided information about BSE to the mother, provided motivation and enthusiasm for the mother to do BSE, provided tools or objects needed when the mother doing BSE, and care also understand the condition of the mother when doing BSE. The social support for nursing students in this study was still below 50% at a high level. The appraisal and information support were above 50%, but emotional and instrumental support was below 50%. Several studies have shown that more than 50% of women in Indonesia did not get family support in early detection of breast cancer, including BSE (Dyanti & Suariyani, 2016; Hanifah, Kirwono, & Wijayanti, 2015; Septiani & Suara, 2012).

Moreover, research in China shows that only 40.74% of women received social support from their families to deal with breast cancer (Cheng et al., 2013). Another study said that women obtained the value of social support to maintain their physical health (mean=36.56) (Sun et al., 2020). The low level of social support made BSE's behavior was low also caused delays in carrying out checks to health services so that increasing the incidence with an advanced stage of breast cancer (Dyanti & Suariyani, 2016; Hanifah et al., 2015).

The social support was provide by nursing students to their mothers in implementing BSE shows that the high level of social support for female more great than male, which a difference of 19.77% (Table 2). The results of this study as same as another research said more women were provide support than men (Harvey & Alexander, 2012). The dominant social support from female to their mother may have a relationship with attachment and closeness. Attachment is a feeling or a strong bond between two or more humans, especially in emotional bonds (Prabowo & Aswanti, 2014). Intimacy is a special relationship with someone (Bojczyk, Lehan, McWey, Melson, & Kaufman, 2011). Another study said that the attachment and closeness between females and mothers are more

generous than male and mother (Andriyani & Sri Indrawati, 2013; Bojczyk et al., 2011; Prabowo & Aswanti, 2014). Attachment and closeness are influenced by good communication quality and quantity (Bojczyk et al., 2011; Prabowo & Aswanti, 2014). Mothers communicate with their daughters more often because they feel that girls need their advice as fellow women to become better women (Bojczyk et al., 2011). Another reason that breast cancer screening is sensitive matters related to sexual organs, which should not be shown especially to men. They feel more comfortable being assisted by other women than men (Dey et al., 2016). Based on the above discussion, communication and gender must considered in providing social support, especially in implementing BSE.

The residence status of respondents were obtained that most students living with their parents (Table 1). Students who live together with their parents have higher social support levels than students who live in boarding houses/apartments with a difference of 14.38% (Table 2). This is likely because students who live with their mothers meet more frequently, making it possible to communicate intensely. This is consistent with the statement that you meet more often, then likely to provide support for each other (Ashida & Heaney, 2008; Sarafino & Smith, 2012). One study said that social support is more obtained from someone physically close or present than infrequently contact (Donev, 2005). This study's results were reinforced by research in Denmark that said women who rarely had contact with friends and family were more likely not to be screened for breast cancer (Jensen, Pedersen, Andersen, & Vedsted, 2015). Other research said that someone who lives with their spouse or children gets more significant social support than someone who lives alone (Unsar, Erol, & Sut, 2016). The more frequent meeting face-to-face in providing social support for the implementation of breast cancer screening has greater welfare than contact by telephone (Smalls et al., 2018). Meeting face-to-face and discussing BSE must be considered in providing social support.

Respondents aged  $\geq 21$  years have a higher social support level than respondents aged  $\leq 20$  years, with a difference of 2.43% (Table 2). Another study said that social support correlates with age (Sun et al., 2020). The attachment relationship is more significant between mother and older child (Onayli & Erdur-Baker, 2013). One study said that more seniors are more aware of health and are likely to carry out healthy behaviors, including BSE (Hajian Tilaki & Auladi, 2015; Sari, 2016). Therefore, it must consider increasing awareness about social support in the implementation of BSE.

### **Categories of Social Support of Nursing Students to Their Mother in Implementation of BSE**

The categories of social support are emotional support, instrumental support, information support, and appraisal support (Sarafino & Smith, 2012). Respondents provide high-level for appraisal support (75.42%), followed by information support (52.54%), emotional support (40.25%) and instrumental support (20.76%) (Table 4).

Providing education such as giving information about BSE is one of solutions to increase knowledge and to control the incidence of breast cancer (Rahayuwati, Rizal, Pahria, Lukman, & Juniarti, 2020; Witdiawati, Rahayuwati, & Purnama, 2019). This study found that more than 50% of



nursing students had provided high information support to their mothers in implementing BSE (Table 4). A high level of information support means that more than 50% of nursing students provide information about BSE to their mothers. The high level of information support in this study was because they had previously received information about BSE. The sources of their knowledge about BSE came from the lecture on campus (46.2%), medical workers (12.4%), print media (11.6%), social media (29%), and websites/articles (0,8%). Whereas in several other studies, it was stated that women from family obtained the source of information about BSE, television electronic, radio, health workers, posters/brochure, counseling, seminars, friends and community (Dyanti & Suariyani, 2016; Hanifah et al., 2015; Smalls et al., 2018; Witdiawati, Sukmawati, & Mamuroh, 2018). Several studies said that more than 50% of women had known information about early detection of breast cancer, including BSE (Fatimah, 2018; Hanifah et al., 2015; Ladyani, 2017; Umiyati, Wardani, & Angraini, 2015). Another research on 65 female students at a University in Turkey said a positive relationship between knowledge about BSE and social support was that increased knowledge led to increased social support (Malak, Bektash, Turgay, Tuna, & Genc, 2009). Based on previous research on nursing students in Universitas Padjadjaran, they had good knowledge about BSE (Nugrahini, Anna, & Emaliyawati, 2012).

The appraisal support had provided more than 70% (Table 4). A high level of appraisal support means that more than 70% of nursing students care and understand their mothers' condition when doing BSE. The high level of appraisal support in this study is different between several tasks, which show a low level, which is less than 50% (Bashirian et al., 2019; Farhadifar, Taymoori, Bahrami, & Zarea, 2015; Smalls et al., 2018).

This study found that about 45% of nursing students provided emotional support at a moderate level (Table 4). This study's emotional support at an average level means that less than 50% of nursing students provide motivation and enthusiasm for their mothers to do BSE. This study is supported by research in Jember, which found that women get moderate emotional support from family such as being loved and appreciated, given solutions, and both to share joys and sorrows when they are healthy or sick (Harjanto, 2019). Several studies have found that their family provided a low level of emotional support to help them implement breast cancer screening, including BSE (Bashirian et al., 2019; Farhadifar et al., 2015; Smalls et al., 2018).

This study found that only a few respondents provided instrumental support to their mothers in implementing BSE (Table 4). The low level of instrumental support means that around 20% of respondents offer assistance of tools or objects needed by mothers when doing BSE. This study was relevant to other studies that found that instrumental support was a low level for implementation BSE (Bashirian et al., 2019; Farhadifar et al., 2015; Jensen et al., 2015; Smalls et al., 2018). Other studies have found that more than 50% of women did not receive support and assistance of materials and facilities such as mirrors to implementing BSE from their family (Despitasaki & Dila, 2017; Kusuma

& Susilawati, 2013; Labibah, Indarjo, & Cahyati, 2018). Instrumental support is one of the rarest social support (Sarafino & Smith, 2012).

Social support in BSE can occur if BSE was considered necessary. Several studies have found the perception that BSE is less critical and has no advantage (Desanti, Sunarsih, & Supriyati, 2010; Kusuma & Susilawati, 2013; Labibah et al., 2018). One study also found the myths that exist in society affect BSE implementation, such as breast cancer caused by witchcraft, and holding the breast is taboo (Desanti et al., 2010). Research on the perceptions of nursing students about BSE found that there are who said that BSE is not essential, it is taboo, and some of them said that they do not have free time to do BSE, lazy, forget, feel challenging to get used, and feel they are not able to do the right BSE (Kusuma & Susilawati, 2013; Priscilla, 2014). Perceptions of BSE have a relationship with BSE behavior, and BSE behavior is a factor that affects social support (Nisa, 2013; Sarafino & Smith, 2012). Therefore, we know that it is possible that students do not provide social support in implementing BSE to their mothers because their perceptions about BSE need to be improved. Therefore, to enhance students' perceptions about BSE, which affects their social support to their mother, educators need to be involved by conducting socialization about BSE and social support in implementing BSE.

## **Conclusion**

This study showed that social support of BSE by nursing students of Universitas Padjadjaran had still low same as emotional and instrumental support. This can be improved by changing perceptions and increasing awareness about BSE. Recommendation for the further research is conducted qualitative research to identify in depth reasons what factors cause social support of BSE by nursing students had still low.

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