

# Negative attitudes & misinformation to breastfeeding among young generation in a nursing program

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#### RESEARCH

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# **ABSTRACT**

# **Background**

Students nurses' negative attitudes, misinformation and lack of support in relation to breastfeeding practice is a major contributing factor to decrease the prevalence and duration of breastfeeding.

#### Aims

To identify breastfeeding attitudes and knowledge among students in a nursing program.

# Methods

A cross-sectional study using validated questionnaire was conducted. The questionnaire includes 8 multiple choice questions on breastfeeding management, 7 questions on attitudes and 13 questions on the knowledge of breastfeeding. Data collection took place in the spring academic term in 2016 at a public university in Saudi Arabia. 250 questionnaires were distributed, of which 234 were completed and returned with a response rate 93.6 per cent. Inclusion criteria included second to fourth year nursing student with the age range from 18–25 years old.

Descriptive statistics were used for data analysis and nonparametric statistic (Mann-Whitney Test) was performed to compare the groups.

#### Results

The results were explained taking into consideration students nurses with or without children. Mean attitude's score for participants without children was 157 as compared to 77 for those with children. The results showed similar negative attitude toward breastfeeding among participants, regardless of having children or not (p=0.35). This means that there was no significant difference in attitudes toward breastfeeding among nursing students either they are having children or not. However, having personal experience with breastfeeding did not increase breastfeeding attitudes and knowledge (p=0.35 vs. p=0.93, respectively).

### Conclusion

The results highlight that female nursing students have negative attitudes, misinformation and lack of knowledge on breastfeeding.

# **Key Words**

Breastfeeding, knowledge, attitude, nursing students

# What this study adds:

## 1. What is known about this subject?

This is the first study showing the breast feeding attitudes and knowledge among nursing school in Saudi Arabia.

# 2. What new information is offered in this study?

There is no data regarding nursing attitude and knowledge among nursing student in Saudi Arabia.

# 3. What are the implications for research, policy, or practice?

This study shows the need to change the curriculum of



nursing school to include more about issues relegated to Breast Feeding.

# **Background**

In developing countries there is increasing media awareness towards the benefits of breastfeeding. Despite this, there is a decline of breastfeeding prevalence and duration among women. This may be due to negative attitudes, misinformation and lack of support in relation to breastfeeding practice among allied health care professionals including nurses.

Nurses are expected to provide continuous care for women throughout their childbearing period.<sup>2</sup> Therefore, nurses have to support, encourage and assist in breastfeeding practice.<sup>3</sup> According to the literature, mothers reported that they did not receive any support regarding breastfeeding from nurses<sup>2</sup>. Also, other studies highlighted that nurses have negative attitudes and lack of knowledge in regards to breastfeeding practice.<sup>3</sup>

Indeed, nursing education is a major influential factor to knowledge regarding breastfeeding. 4,5 Lack of education and training in nursing programs will have a negative impact on nursing students' knowledge, beliefs and attitudes.<sup>5</sup> This will result in nurses failing to support mothers when breastfeeding.4 A qualitative study recommended that nursing students beliefs and attitudes have a direct influence in promoting the breastfeeding practice. 5 Another study reported that health science students including nursing undergraduates have negative attitudes and beliefs regarding breast feeding.<sup>6</sup> In the Middle-east, there was one study which indicated that medical students have negative attitudes and some degree of knowledge regarding breastfeeding.<sup>7</sup> In Saudi Arabia, there is a little emphasis towards attitudes and knowledge of breastfeeding especially among nurse's students. There were no studies done in Saudi Arabia regarding nursing students' attitudes and knowledge on breastfeeding.

The aim of this study is to identify breastfeeding attitudes and knowledge in a bachelor of nursing program in Saudi Arabia.

# Method

This is a cross-sectional study via the application of questionnaires. Ethical approval from a nursing collage at Princess Nourah University (PNU) was sought before conducting the study. Author permission to use the tool was

sought out before data collection.8

Nursing Students (n=239) in a bachelor of nursing program at PNU were invited to take part in this study. Data collection took place in the spring academic term in 2016 between October and December. The nursing program in our study includes courses with learning outcomes focusing on increasing the knowledge on breast feeding among their students. These courses start in year two (growth and development course) and year four (maternity and child care. Students' were approached in their lectures and were invited to participate in the study. Face to face explanation and answer session was given to students before filling the questionnaire. Also, information sheet and consent form were distributed to participants. All participants were females as PNU is an only females University located in Riyadh, Saudi Arabia. Participants were invited to complete self-administered survey. Both married and single undergraduate students with the age range from 18-25years old were included. In case participants felt any completing the discomfort during questionnaires, participants were informed that they can withdraw freely without any pressure. No cases were reported.

A validated questionnaire tool was used to measure nursing students' knowledge and attitudes about breastfeeding. Author permission to use the tool was sought out before data collection. The questionnaire consisted of four parts namely; knowledge, attitude, breastfeeding management and demographic data. The first part included 7 questions on knowledge and the second part included 13 questions on attitude. These questions were all in 5 Likert scale formats. The first and second parts of the questionnaire were scored from 5 (high) to 1 (low). The total sum of knowledge ranged from 7 to 35 and for attitude ranged from 13 to 65. The higher the score indicating more positive attitude and knowledge on breastfeeding.

The third part included 8 questions on breastfeeding management in a multiple-choice format and the fourth part included demographic data information including gender and whether participants had children or not. The questionnaire<sup>8</sup> was administered in its original English version as all nursing courses at PNU are taught and conducted in the English language.

Data were analyzed using the Statistical Package for Social Sciences (version 18.0.0, SPSS Inc., Chicago, 2009). Descriptive statistics were used to characterize the demographic data, knowledge and attitude scores. Mann-Whitney Test was performed to compare the summary measure of knowledge and attitudes according to



participants' whether they had children or not. Statistically significant was set at p equal to or <0.05 level. Data are presented as proportion of respondents or mean±SD.

#### Results

Overall, 250 questionnaires were distributed, of which 234 were completed and returned. Table 1 shows sociodemographic features of the study group, of whom 77 (33 per cent) already have children. Nursing students strongly agreed that health professionals should actively encourage all mothers in their practices to initiate early breastfeeding (Mean=4.2–5). Only less than 1.8 of Nursing students disagree that they should actively encourage mothers to initiate breastfeeding.

#### Personal Experiences of having children

According to Table 2, there were 33 per cent (n=77) of participant who had children and 67 per cent (n=157) of participant who did not. Participants with personal experience (having children) differed from those with no personal experience in the reasons given for active involvement of health professionals to encourage all mothers to try breastfeeding. Participants with no children were more likely not to agree on active involvement of health profession with an agreed mean of  $3.9\pm1.8$  and disagreed with a mean of  $4.74\pm0.75$ . Also, there were significant difference in their response (p=0.002) see Table 3. Interestingly, nursing student did not agree that breastfeeding for infants would have more benefits than formula feeding as only mean of  $3.8\pm1.4$  vs. a mean of  $4.53\pm0.9$  agreed on that (p=0.01) see Table 3.

# Management of breastfeeding

In regard to, the management of breastfeeding problems in Table 4, 46 per cent of participants recommended to continue feeding on both breasts while having mastitis whereas 53 per cent of participant did not. There were 6 participants who recommended stopping breastfeeding. In relation to seeking appropriate advice for breast milk insufficiency, more than half or participants 57 per cent correctly recommend increasing frequency of breastfeeding on demand and seeking expert help if needed, whereas 42 per cent made no such recommendation. Participants varied in their initial recommendations regarding correct symptoms to indicate a poorly attached baby as 79.5 per cent agreed that very frequent feeding mother has sore nipples and or repeated engorgement/mastitis, and 20.5 per cent did not agreed on that.

In relation to available options to manage sore nipples that include: checking for nipple thrush, apply breast milk, seek expert help with attachment, and apply lanolin to cracked

nipples more than three fourths of participants 61.5 per cent correctly agreed upon suggested resolution, whereas 38.5 per cent did not agreed on that. Only one fourth 37 per cent of all respondents were aware about correct symptoms of nipple thrush (e.g., pink, sensitive, tender, cracked nipples, shooting and burning pain in the breast).

#### Discussion

Negative attitudes and misinformation in relation to breastfeeding practice among health care professionals including nurses, are major contributing factors to decrease the prevalence and duration of breastfeeding. Nurses are considered as the largest group of allied health professionals who are able to provide support to potential breastfeeding mothers. The aim of this study was to identify breastfeeding attitudes and knowledge among female students in a nursing program.<sup>9</sup>

According to our results, there was a negative attitudes and lack of knowledge on breastfeeding among nursing students. The results highlighted that, both women who have and don't have children agreed that health professionals should actively encourage all mothers in their practices to initiate early breastfeeding. This result was similar to other studies.<sup>7,10</sup>

In regard to students' attitude of having personal experiences in breastfeeding, interestingly, the results indicated a significant difference among students who have children and students who do not. Nursing students with experience in breastfeeding (having children) reported that, health care professionals should be more actively involved in encouraging mothers to try breastfeeding. While nursing students who did not have experience in breastfeeding reported the opposite. Having children was a major factor for differences in breastfeeding attitudes among nursing students' responses. A research study, 11 reported similar results as women with children have positive attitudes to breastfeeding. Having positive personal experience in breastfeeding was also reported as a factor for positive attitude among nurses. 12

In regard to, students' knowledge on breastfeeding milk benefits in comparison with formula milk. Our study reported that nursing students without children did not agree that breastfeeding milk for infants would have more benefits than formula feeding milk. This misinformation on students' knowledge regarding breastfeeding benefits may be due to lack of training and education in their nursing program. Indeed, nursing programs should focus on improving breastfeeding attitudes among nursing students



and who have particularly negative breastfeeding experiences. 12

According to the results, nursing students varies in their knowledge on management of breastfeeding problems. For example, most nursing students' initial recommendations on correct symptoms to indicate a poorly attached baby while breastfeeding were correct. However, there were a clear indication regarding the lack of knowledge on correct symptoms of nipple thrush, advice for mastitis, and advice for breast milk insufficiency. These results were similar to another study conducted among medical students. A study by Register and colleagues, reported that, less than half of the registered nurses in their sample did not receive education and training on breastfeeding in their undergraduate nursing programs.<sup>3</sup> According to their results, this affected nurses to have negative attitudes towards breastfeeding.<sup>3</sup> Also, a study reported that undergraduate nurses did not receive education on breastfeeding practice, which resulted in negative attitudes towards breastfeeding practice. 13 On the other hand, natural attitude among nursing students were reported in another study. 11 Furthermore, a comparative study was done on medical and nonmedical students and reported low knowledge on breastfeeding among both groups. 10

It appears that knowledge and attitudes are correlated to each other. Therefore, in order for our nursing students to have positive attitudes regarding breastfeeding, it is crucial to focus on our nursing students' education and training. Educating our future nurses on breastfeeding should be on best practice and evidence based research on breastfeeding. Nursing educators, have to increase student's awareness by increasing their knowledge on benefits of breastfeeding practice and to ensure that students adhere to best practice, policies and clinical guidelines related to it. 14

In light of our results, nursing education and training are a fundamental aspect in improving our future nurses' knowledge, skills, and experience needed in clinical practice. Indeed, by having these on hand, it will affect our students' attitudes towards breastfeeding and they will have positive attitudes in practice. In practice.

In summary, our study highlights nursing student insight regarding their attitudes and knowledge of today's generation. Further research is needed to explore young generation insights, feelings and thought regarding breastfeeding.

This study only included female participants and one public

University which might affect the generalizability of the results. Adding a qualitative arm to this study to understand students feelings, insights and attitudes on negative and misinformation on breast feeding practice.

#### Conclusion

The results highlights that, female nursing students have negative attitudes, misinformation and lack of knowledge on breastfeeding. Therefore, students' future role as professional nurses in promoting, supporting and assisting women in breastfeeding won't be possible.

International health organization such as the World Health Organisation need to emphasis on medical educators, administrators, and program directors of promoting breastfeeding practice within their health sciences and nursing programs. Actions will be needed to ensure that allied healthcare students including nurses correct the misinformation on breastfeeding which might lead to negative attitudes. The emphasis should be both in the initial medical education programs and further in continuing medical education careers.

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# **PEER REVIEW**

Not commissioned. Externally peer reviewed.

# **CONFLICTS OF INTEREST**

The authors declare that they have no competing interests.

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# **ETHICS COMMITTEE APPROVAL**

Ethical approval for the study was obtained from the Nursing Collage at Princess Nourah bint Abdelrahaman University.



Table 1: Socio-demographic characteristics of participants (n=234)

Variable	n (%)		
Gender			
Female	234(100)		
Do have children			
Having children	77(33)		
Not having children	157(67)		
The degree of approval	Mean		
The degree of approval strongly disagree	<b>Mean</b> < 1.8		
<u> </u>			
strongly disagree	< 1.8		
strongly disagree Disagree	< 1.8 1.8-<2.6		

Table 2: Participants mean responses about breastfeeding attitude in relation to Nurses with and without children

Questions	Participants had children (mean±SD)	Participants without children (mean±SD)	<i>p</i> -value
Health professionals should actively encourage all mothers in their practices to try breastfeeding	3.90±1.8	4.74±0.75	0.002
Formula feeding is good way of letting fathers care for the baby	2.70±1.3	2.76±1.5	0.903
Breast milk is the ideal food for babies	3.80±1.3	4.29±1.3	0.247
A mother who occasionally drinks alcohol should not breastfeed her baby	3.80±1.0	3.23±1.5	0.228
Mothers intending to breastfeed should expect sore nipples as a normal part of breastfeeding	2.70±1.4	3.12±3.1	0.67
Health professionals have little influence on a woman's decision to continue breastfeeding	2.50±1.3	2.53±1.3	0.925
A breastfed baby is likely to have fewer infections than a formula fed baby	4.10±1.2	4.55±0.9	0.11
Formula fed babies are more likely to be overfed than breastfed babies	4.10±1.5	4.05±1.2	0.905
Breastfeeding is beneficial to a mother's health	3.40±1.3	4.27±1.1	0.012
Breast milk alone can satisfy most babies for approximately the first six months	3.70±1.2	4.30±1.1	0.104
Formula milk is more easily digested than breast milk	2.20±1.4	1.84±1.3	0.383
Breastfeeding provides health benefits for infants that cannot be provided by formula	3.80±1.4	4.53±0.9	0.014
Fathers feel left out if a mother breastfeeds	3.30±1.7	2.61±1.6	0.176



# Table 3: Comparison between those with and without children for attitude and knowledge scores

Variable	breastfeeding attitude		breastfeeding knowledge	
	mean	rang	mean	Rang
Female (n=234)	46.36	27-59	21.55	09-29
Mann-Whitney test	p=0.06		p=0.035	
Without children (n=157)	46.78	30-85	22.41	11-35
With children(n=77)	44	27-65	21.5	09-35
Mann-Whitney test	p=0.355		p=0.933	

Table 4: Scores for management of breastfeeding problems

Breastfeeding problems	Correct n (%)	Uncorrected n (%)
Appropriate advice for mastitis (Continue to feed on both breasts)	111(46.4)	128(53.6)
Appropriate advice for breast milk insufficiency (Increase breastfeeding frequency and seek expert help)	138(57.7)	101(42.3)
Correct symptoms to indicate a poorly attached baby (very frequent feeding, mother has sore nipples/repeated engorgement/mastitis)	190(79.5)	49(20.5)
Resolution of sore nipples (check for nipple thrush, apply breast milk, seek expert help with attachment, apply lanolin to cracked nipples)	147(61.5)	92(38.5)
Correct symptoms of nipple thrush.(pink, sensitive, tender, cracked nipples; shooting, burning pains in the breast)	89(37.2)	150(62.8)