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KNOWLEDGE, COMPETENCE AND ATTITUDE OF PHYSICIANS TOWARD BREAKING BAD NEWS, IN DAMMAM, EASTERN PROVINCE, SAUDI ARABIA 2018-2019

Medicine

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ABSTRACT

Background: Breaking bad news (BBN) is considered a crucial skill in all branches of medicine. Absence of effective BBN can lead to negative consequences and jeopardize doctor-patient relationship. This study aims to assess physicians' competencies in BBN of different specialties in Dammam, Saudi Arabia.

Method: A cross sectional study was conducted from Feb 2018 till March 2018 among 208 physicians practicing in two governmental hospitals at Ministry of Health. A self-administered questionnaire for BBN was used.

Results: Among the surveyed physicians, only 10% had a good knowledge about BBN while 57 % their knowledge was fair. Thirty-one percent considered their practice in BBN as highly competent and the majority (69%) have positive attitude towards BBN. Several factors were associated with high level of competence like being non-Saudi physicians, more experienced, consultant, and low work load.

Conclusion: Although physicians' knowledge rated poor to fair among the majority, most have positive attitude towards BBN. Therefore, efforts to consolidate knowledge and practice of BBN are highly recommended.

KEYWORDS

Breaking bad news (BBN), Ministry of health (MOH), competence, attitude

INTRODUCTION

Delivering high-quality health care services is the ultimate goal for any health care organization. This can be achieved by delivering services through health care team members working together with good communication skills to their patients, and their families [1].

Breaking bad news is considered one of the fundamental parts of communication skills required in almost all branches of medicine. This includes all physicians and surgeons regardless of their specialties [2]. Disclosure of bad news is considered inevitable in most medical institutions and vital skill in their duties [3]. It is often a difficult, challenging and unpleasant task faced by most physicians [4]. It may be a stressful situation for physicians that may lead to job dissatisfaction and can introduce medical errors and legal issues against the doctor and health authorities [5].

Bad news is defined as 'Any news that can adversely and severely affect an individual's view of his or her future [6]. For example: a recent diagnosis of cancer, fetal congenital anomalies in a pregnant woman and so on. It is often associated with a situation where the patient experiences feeling of no hope, a threat to their mental or physical wellbeing [5].

Absence of effective BBN can lead to negative consequences and jeopardize doctor patient relationship. It can make the patient over-estimate his/her chances of survival. This can result in erroneous patient's decision regarding their plan of management. Also, the avoidance of BBN can result in poor patient satisfaction, and had bad impact on the patients' physical and psychological wellbeing. Therefore, patient's preferences should be explored and accurate information should be disclosed rather than withhold in a way to protect the patient from losing hope or being upset [9,10,11and12].

On the other hand, BBN effectively by the physician will enhance doctor-patient relationship, make the patients and their relatives emotionally better prepared and help them to take the right decision about the management plan. It will also improve patient's adherence to treatment, increase their level of satisfaction and decrease their anxiety and depressive symptoms [1,9].

There have been various protocols and guidelines forms to facilitate and prepare patient for receiving bad news and physicians can build on it. For example; the six steps protocol 'SPIKES' [7] and the 'ABCDE' protocol [8].

Up to the researcher knowledge, the majority of studies conducted in Saudi Arabia concerning BBN were focusing on patients, physicians' perception and attitudes. It was performed mostly on oncologists in secondary/tertiary care hospitals. Information on physician's competencies in BBN in secondary care facilities in Eastern Province are lacking.

Therefore, this study aims to assess the physicians' competencies who work in secondary care hospitals in different specialties in Dammam, about BBN to their patients.

MATERIALS AND METHOD

This is a cross sectional study conducted in two main governmental hospitals at Ministry of Health (Dammam Central Hospital and Maternity and Child Hospital) in Dammam, Eastern Province, Saudi Arabia. It includes practicing physicians working in internal medicine, pediatrics, general surgery, OB/GYNE, ER, ENT and ophthalmology. The study sample was calculated using Raosoft calculator tool based on the latest physician's statistic during the period (26-Feb 2018 to 4-March 2018), and simple stratified sampling technique was used. All data were collected through self-administered questionnaire developed following the Rabow and McPhee's ABCDE mnemonic for BBN (Advance preparation, Build therapeutic relationship, Communicate well, Deal with patient and family reactions, Explore patient's understanding). The questionnaire has been adjusted and validated in previous study[15]. It was divided into 3 sections: **section (A)** includes physician's personal data and factors affecting BBN process like age, gender, nationality, language, job, years of experience, previous training in BBN, university of graduation, work load and number of BBN done per month. **Section (B)** includes items to evaluate knowledge about BBNs. **Section (C)** includes 4 Likert scale of items on perception of competence and attitude toward BBN. The reliability test (Cronbach's Alpha) for knowledge, perception of importance and competence was calculated 0.649, 0.879, and 0.895 respectively. Analysis done using (SPSS) software version 20. All variables were coded before entry and appropriate statistical tools were used after data collection. P-values less than 0.05 was considered statistically significant.

The total knowledge score was calculated by adding the sum of correct answers scores which was classified into 3 levels: poor (if score less than 60% of maximum (i.e.0-14), fair (60-80% i.e. 15-19) and good (if score more than 80% of maximum i.e. 20-25).

The total score of perceived competence and attitude toward BBN were calculated by addition of the total scores of each statement of the 4 Likert scale. Twenty-two correct statements were listed, the minimum score was zero and the maximum score was 66. Then, the total scores were categorized into 3 levels: low (0-39), moderate (40-53) and high level (54-66).

Ethical Consideration

Approval of the study was issued by Institutional Review Board (IRB) research committee and local committee in Saudi board of family medicine prior to start of the study.

RESULTS

A total of 208 physicians from different specialties participated in this study. The majorities were Saudis (74.5%) and almost equally distributed based on gender. Their mean age was 34 years. The majority were Arabic speakers (92.8%) and mainly works as residents (66.3%). About one-third graduated from non-Saudi universities. Thirty seven percent had less than 5 years of experience while around (24%) had more than 15 years of experience. Those who received under graduate training in BBN constitute (48.1%) of the respondent while (63.9%) did not receive any in-service training. The mean number of patients seen per day per physician was 22 and the mean number of BBN practiced done per month was five (Table 1).

Table 1: Description of physicians' socio-demographic characteristics

Background information	Mean ±SD
Quantitative variables	
Age	34.72 ±9.24
No. of Patients/Day	22.37 ±32.86
No. of BBNs/Month	5.35 ±12.58
	N(%)
Gender:	
Male	102 (49)
Female	106 (51)
Nationality:	
Saudi	155 (74.5)
Other	53 (25.5)
Language:	
Arabic Speaking	193 (92.8)
Non Arabic speaking	15 (7.2)
Job	
Consultant	29 (13.9)
Specialist	41(19.7)
Resident	138 (66.3)
Years of Experience:	
More than 15	49 (23.6)
11-15	25 (12)
5-10	57 (27.4)
Less than 5	77 (37)
University of graduation:	
Dammam	66 (31.7)
Other Saudi	62 (29.8)
Non Saudi	80 (38.5)
Under graduate training:	
Yes	100 (48.1)
No	108 (51.9)
In-service training:	
Yes	75 (36.1)
No	133 (63.9)
Specialty:	
Internal medicine	23 (11.1)
Pediatric	84 (40.4)
Obstetrics & Gynecology	38 (18.3)
General surgery	20 (9.6)
Emergency medicine	25 (12)
ENT	8 (3.8)
Ophthalmology	10 (4.8)

Figure 1: Level of Knowledge, Perceived Competence and attitude of physicians toward BBN.

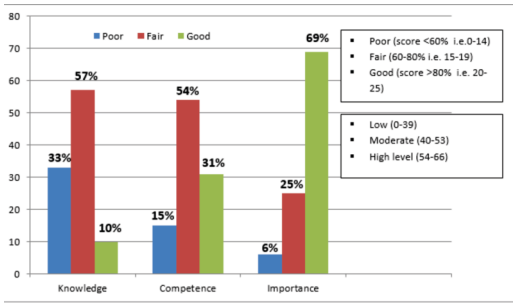

Figure 1 shows that only 10% of the total participated physicians had a good knowledge about BBN while 57 % of their knowledge level was fair. Thirty one of physicians considered their practice in BBN as high level of competence while 54% of them were a moderate. The majority of physicians considered BBN of high importance 69%, while only 6% considered it as low importance.

Table 2: Description of physicians' total knowledge score in different steps in BBN (n=208)

Statement	Incorrect answer N (%)	Correct answer N (%)
Knowledge about Advanced preparations		
An exposed area of emergency room or waiting room is an acceptable location for the delivery of breaking bad news.	24 (11.5)	184 (88.5)
Meet patient in your clinic and it's ok to answer your phone after taking patient permission.	101 (48.6)	107 (51.4)
It is essential to revise your patient file before you meet him/her	194 (93.3)	14 (6.7)
Prepare yourself to be emotionally involved with your patient for better support.	52 (25.0)	165 (75.0)
It is essential to provide detailed information about the diagnosis, prognosis and treatment.	29 (13.9)	179 (86.1)
Knowledge about Building a therapeutic\ environment relationship		
You always need to introduce yourself so patient will feel comfortable	9 (4.3)	199 (95.7)
Patient should be told only what he/she wants to know about the diagnosis	114 (54.8)	94(45.2)
Having a family member attending the session will only complicate already difficult situation	8(38.9)	127 (61.1)
You should go into consultation room and explain that situation is complex	98 (47.1)	110 (52.9)
It is better not to touch patients after telling the news	109 (52.4)	99 (47.6)
Assure your patient that you will be available for help	23 (11.1)	185 (88.9)
Knowledge about Communication		
Asking patient how much he/she knows about his condition does not significantly affect the outcome of breaking bad news.	83 (39.9)	125(60.1)
Speak frankly and use medical terms if needed	90 (43.3)	118 (56.7)
If the patient starts to cry, urge him/her to talk to overcome the discomfort	124 (59.6)	84 (40.4)
After telling the news, encourage the patient to ask questions and answer them	26 (12.5)	182(87.5)
By the end of each visit let the patient summarize the information he/she got	68 (32.7)	140 (67.3)
If the patient understands everything, it is not necessary to schedule a follow-up meeting	58 (27.9)	150 (72.1)
Knowledge about Dealing with patient and family reactions		
Dealing with the patient reaction is more important than dealing with the family reaction to the situation	134 (64.4)	74 (35.6)
It is OK to cry with the patient to show him/her that you care	54(26.0)	154 (74.0)
Sometimes you need to argue with or criticize colleagues during the session to show support for your patient	62(29.8)	146(70.2)
Some patients need to be monitored for their emotional state in every visit	66 (31.7)	142(68.3)

Knowledge about Encourage and validate emotions		
Before the patient leaves the office make sure you provide the patient with some hope	61(29.3)	147 (70.7)
Support patient's emotional and spiritual needs even without exploring what the news means to the patient	137(65.9)	71 (34.1)
Always offer referral to your patient as an option of treatment	157(75.5)	51 (24.5)
Discuss treatment options and arrange follow up meeting for decision making	19(9.1)	189 (90.0)

A. Physicians' knowledge about BBNs:

Table 2 shows the majority of respondents (88.5%) correctly knew the importance of maintaining patient's privacy during the process of BBN and an exposed area of emergency room or waiting room is not an acceptable location for BBN. On the other hand, only (6.7%) could recognize it is essential to revise patient's file before meeting the patient. Most of them identify the initial step to introduce themselves to the patient (95.7%), the importance to discuss treatment options and arrange follow up meeting for decision making (90%), and assure their patient for their available support (88.9%). After BBN, the majority knew it is essential to encourage the patient to ask questions and answer them (87.5%) and to provide detailed information about the diagnosis, prognosis and treatment options (86.1%).

Table 3: Description of physician's perception about their competency level in BBN (n=208)

Skills	Not at all Competent N (%)	Some-what Competent N (%)	Fairly Competent N (%)	Extremely Competent N (%)
Advanced preparations				
Arranging adequate time, privacy and no interruptions	5 (2.4)	22 (10.6)	100 (48.1)	81, (38.9)
Reviewing relevant clinical information	1 (0.5)	23 (11.1)	78 (37.5)	106 (51.0)
Providing information about the diagnosis, treatment and prognosis	3 (1.4)	21 (10.1)	84 (40.4)	100 (48.1)
Prepare yourself emotionally.	6 (2.9)	53 (25.5)	93 (44.7)	56 (26.9)
Building a therapeutic\ environment relationship				
Ask for present of family or support persons	9 (4.3)	37 (17.8%)	74 (35.6%)	88 (42.3)
Introduce yourself to everyone	7 (3.4)	18 (8.7)	52 (25.0)	131 (6.0)
Determine what and how much the patient wants to know	2 (1.0)	40 (19.2)	111 (53.4)	55 (26.4)
Warn the patient that bad news is coming	13 (6.3)	39 (18.8)	94 (45.2)	62 (29.8)
Use touch when appropriate	34 (16.3)	49 (23.6)	78 (37.5)	47 (22.6)
Communication well				
Schedule follow-up appointments	11 (5.3)	27 (13.0)	76 (36.5)	94 (45.2)
Ask what the patient or family already knows	4 (1.9)	18 (8.7)	90 (43.3)	96 (46.2)
Being frank but compassionate; avoid medical terms	4 (1.9)	32 (15.4)	77 (37.0)	95 (45.)7
Allow for silence and tears; proceed at the patient's pace	2 (1.0)	38 (18.3)	83 (39.9)	85 (40.9)
Have the patient describe his or her understanding of the news	1 (0.5)	21 (10.1)	96 (46.2)	90 (43.3)
Allow time to answer questions; write things down and provide written information	2 (1.0)	36 (17.3)	67 (32.2)	103 (49.5)
Dealing with patient and family reactions				
Assess and respond to the patient and the family's emotional reaction	4 (1.9)	34 (16.3)	92 (44.2)	78 (37.5)
Show empathy	5 (2.4)	33 (15.9)	63 (30.3)	107 (51.4)
Do not criticize colleagues or medical staff	7 (3.4)	23 (11.1)	61 (29.3)	117 (56.3)
Encourage and validate emotions				
Explore what the news means to the patient	3 (1.4)	22 (10.6)	104 (50.0)	79 (38.0)
Offer realistic hope according to the patient's goals	4 (1.9)	30 (14.4)	81 (38.9)	93 (44.7)
Provide emotion and spiritual support	4 (1.9)	23 (11.1)	98 (47.1)	83 (39.9)
Discuss treatment options	4 (1.9)	11 (5.3)	62 (29.8)	131 (63.0)

B. Physician's perception about their BBNs Practice:

Table 3 demonstrates that almost two-thirds of physicians (63%) perceived themselves as extremely competent in discussing treatment options. Nearly half of them (56.3%) thought they were extremely competent in avoiding criticizing colleagues or medical staff. Around (51.4%) thought they were extremely competent in showing empathy while BBN, reviewing relevant clinical information (51%), allowing time to answer questions, writing things down and provide written information (49.5%) and providing information about the diagnosis, treatment and prognosis (48.1%). On the other hand, only (6%) believed they were extremely competent in introducing themselves to patient and family member.

Table 4: Description of physician's attitude towards BBN process (n=208)

Skills	Not at all important N (%)	Some-what important N (%)	Fairly important N (%)	Extremely important N (%)
Advanced preparations				
Arranging adequate time, privacy and no interruptions	2(1.0)	13 (6.3)	26 (12.5)	167 (80.3)
Reviewing relevant clinical information	2 (1.0)	11 (5.3)	36 (17.3)	159 (76.4)
Providing information about the diagnosis, treatment and prognosis	1 (0.5)	8 (3.8)	45 (21.6)	154 (74.0)
Prepare yourself emotionally.	4 (1.9)	20 (9.6)	64 (30.8)	120 (57.7)
Building a therapeutic environment/relationship				
Ask for present of family or support persons	4 (1.9)	21 (10.1)	56 (26.9)	127 (61.1)
Introduce yourself to everyone	1 (0.5)	15 (7.2)	38 (18.3)	154 (74.0)
Determine what and how much the patient wants to know	1 (0.5)	9 (4.3)	51 (24.5)	147 (70.7)
Warn the patient that bad news is coming	12 (5.8)	27 (13.0)	57 (27.4)	112 (53.8)

Use touch when appropriate	21 (10.1)	39 (18.8)	59 (28.4)	89 (42.8)
Communication well				
Schedule follow-up appointments	4 (1.9)	15 (7.2)	50 (24.0)	139 (66.8)
Ask what the patient or family already knows	5 (2.4)	10 (4.8)	62 (29.8)	131 (63.0)
Being frank but compassionate; avoid medical terms	6 (2.9)	15 (7.2)	50 (24.0)	137 (65.9)
Allow for silence and tears; proceed at the patient's pace	3 (1.4)	15 (7.2)	66 (31.7)	124 (59.6)
Have the patient describe his or her understanding of the news	1 (0.5)	9 (4.3)	70 (33.7)	128 (61.5)
Allow time to answer questions; write things down and provide written information	4 (1.9)	12 (5.8)	53 (25.5)	139 (66.8)
Dealing with patient and family reactions				
Assess and respond to the patient and the family's emotional reaction	3 (1.4)	16 (7.7)	61 (29.3)	128 (61.5)
Show empathy	4 (1.9)	14 (6.7)	56 (26.9)	134 (64.4)
Do not criticize colleagues or medical staff	5 (2.4)	14 (6.7)	33 (15.9)	156 (75.0)
Encourage and validate emotions				
Explore what the news means to the patient	1 (0.5)	18 (8.7)	68 (32.7)	121 (58.2)
Offer realistic hope according to the patient's goals	4 (1.9)	18 (8.7)	53 (25.5)	133 (63.9)
Provide emotion and spiritual support	3 (1.4)	14 (6.7)	52 (25.0)	139 (66.8)
Discuss treatment options	0 (0)	6 (2.9)	28 (13.5)	174 (83.7)

C. Physician's attitude towards BBNs process:

Table 4 illustrate most of the participated physicians (80.3%) perceived arranging adequate time, maintaining privacy and avoiding interruptions during the process of BBN as extremely important. Also discussing treatment options (83.7%), reviewing relevant clinical information (76.4%) and avoiding colleagues or medical staff criticism (75%) were perceived as extremely important BBN skills by most of them.

Table 5: Association between physicians' knowledge, competence and attitude score in BBNs and socio-demographic characteristics

Background Information	Knowledge		Competence		Importance	
	Mean ±SD	p-value	Mean ±SD	p-value	Mean ±SD	p-value
Gender:						
Male	2.9± 15.8	0.954	8.6± 49.6	0.381	9.0± 55.0	0.155
Female	3.3± 15.9		9.0± 48.5		10.0± 56.9	
Nationality:						
Saudi	3.1± 15.6	0.094	9.0± 48.1	*0.008	9.7± 56.0	0.755
Other	3.1± 16.5		7.9± [a] 51.8		8.8± 55.6	
Speaking language:						
Arabic speaking	3.1± 15.9	0.852	8.9± 49.0		9.4± 56.2	
Non Arabic speaking	3.3± 16.0		8.1± 50.0	0.653	10.6± 52.3	0.124
Job:						
Consultant	2.5± 15.9	*0.028	6.3± [c]54.1	*0.001	8.2± 58.0	0.111
Specialist	2.8± [b]17.0		7.8± 50.5		6.4± 58.0	
Resident	3.3± 15.5		9.1± 47.6		10.4± 55.0	
Years of Experience:						
More than 15	2.8± 16.7	0.127	6.0± [d]53.5		7.0± 58.1	
11-15	2.8± 16.0		8.4± 50.7	*0.001	6.2± 57.1	0.076
5-10	3.5± 15.6		9.2± 48.0		12.7± 53.5	
Less than 5	3.0± 15.4		9.1± 46.6		8.7± 56.1	
University of graduation:						
Dammam	2.9± 15.7	0.783	9.3± 47.1	*0.023	9.8± 55.9	0.884
Other Saudi	3.5± 16.1		8.5± 48.7		10.7± 56.5	
Non Saudi	3.0± 15.8		8.3± [e]51.0		8.3± 55.7	
Under- graduate training:						
Yes	3.2± 16.0	0.520	8.9± 47.75	*0.035	10.3± 55.0	0.159
No	3.0± 15.7		8.6± [f] 50.3		8.6± 56.8	
In-service training:						
Yes	3.2± 16.4	0.071	7.8± 49.6	0.546	56.2 ±9.7	8110.
No	3.1± 15.6		8.9± 48.8		55.9 ±9.4	
Specialty:						
Internal medicine	3.3± 15.5		8.9± 46.9		10.0±55.0	
Pediatric	3.2± 16.5	0.095	7.4± [g]51.0	*0.027	6.8± 58.1	0.154
Obstetrics & Gyne	2.5± 15.0		9.5± 48.1		12.0± 54.2	
General surgery	3.2± 15.8		8.1± 47.4		11.0± 53.4	
Emergency	3.2± 14.8		11.3± 45.9		12.0± 53.5	
ENT	2.6± 16.7		8.3± 46.8		7.0± 58.5	
Ophthalmology	16.0 ±2.5		h ±7.054.1		8.9± 55.9	

* Statistical significant at p<0.05

a Non saudi was significantly higher than saudi

b Specialists were significantly higher than resident

c Consultants were significantly higher than residents

d who had more than 15 years' experience was significantly higher than who had less than 5 years or 11-15 years.

e Non Saudi university graduated physicians were significantly higher than Dammam university

f Who did not receive under graduated training in BBN was significantly higher than who receive training in BBN

g Pediatricians were significantly higher than IM and ER physicians

h Ophthalmologist was significantly higher than general surgeons, ER physicians and IM physicians.

Factors affecting physicians' knowledge, competence and attitude score in BBN:

Table 5 reveals that physicians' knowledge in BBN was significantly higher among specialists compared to residents (17±2.8 versus 15±2.5), p=0.028. Other socio-demographic characteristics did not significantly affect their level of knowledge in BBN.

Regarding physicians' perceived level of competence, table 5 indicates the non-Saudi physicians (p=0.008) and those graduated from non-Saudi universities (p=0.023) perceived themselves more competent in delivering bad news. Also consultants (p<0.001) and those with more experience (p<0.001) had better level of competence in BBN. In contrast, physicians who lack under-graduate training (p=0.035) also perceived themselves more competent in BBN. Furthermore, ophthalmologists had the higher level of competence in comparison to other specialties, whereas Pediatricians were significantly higher than Internist and ER physicians (p=0.027).

Lastly, no factors were found to significantly affect the total importance score of physicians' attitudes towards BBN in this study (table 5).

Table 6: Correlation of work load and physicians' knowledge, competence and attitude scores in BBN

		Knowledge score	Competence score	Attitude score
Knowledge score	R	1	0.360	0.372
	P		0.000*	0.000*
Competence score	R	0.360	1	0.540
	P	0.000		0.000*
Importance score	R	0.370	0.540	1
	P	0.000*	0.000*	
No. of Patients Seen/ Day (work load)	R	- 0.043	- 0.203	- 0.206
	P	0.533	0.000	0.003*

R: Coefficient of correlation

Table 6 indicates significant positive correlation between knowledge, competence and attitude of BBN. On the other hand, a significant negative correlation between knowledge, competence and attitude of BBN and work load was found.

DISCUSSION

Breaking bad news is considered as a difficult task by most physicians, independent of their specialty [13]. Improving physicians' competencies in BBN will make them feel more confident and efficient in delivering bad news to their patients [1]. This study enrolled 208 physicians from different specialties who work in secondary care hospitals in Dammam, Saudi Arabia to explore their knowledge, competence and attitude BBN.

Among the surveyed physicians, only 10% of them had good level of knowledge concerning BBN whereas 33% and 57% had poor and fair level respectively. Most physicians had fair knowledge about steps of patients' preparation with regard to maintaining patient's privacy and disclosing full information to aid them in decision making and assure their support. However, more than half (64.4%) fail to recognize the step of reviewing patient's file before BBN (table1). These findings are a similar to the result of study carried out in AlQassim Region (KSA) where most physicians working in secondary care hospitals lacked essential knowledge regarding BBNs [14]. Another study carried out in Dammam (KSA) by Albunaian N, et al [15] supports these findings. Insufficient knowledge was also reported in others overseas studies conducted in India and Iran [16,17].

Interestingly, Physicians' knowledge and perceived level of competence in BBN was not affected by gender differences. This is contrary to the results of a study carried out in Dammam and USA [15,18], in which female physicians showed better knowledge and perceived level of competence about BBNs than males. Where is in Iranian study, the opposite was observed as lower levels of BBN perceived competence and knowledge was reported among female compared to male physicians [17]. Cultural variation is the probable reason for that difference.

Despite one-third of physicians in the current study (36.1%) reported receiving of in-service training in delivering BBN, their knowledge in BBN was generally poor. Furthermore, their in-service training was not associated with significant improvement to their knowledge, competence or perceiving importance of BBN (table 5). Even, lack of under-graduate training was associated with better physicians' competence of the in BBN. These results support the findings of, Stevenson FA, et al who reported that despite of training, physicians usually face difficulties in BBN to patients [19].

On the other hand, other studies have shown communication skills and BBN training can positively affect the interviewing styles and improve physicians' beliefs [20].

One study carried out in Dammam [15] demonstrates positive effect of in-service training on physicians' knowledge, perception of competence and importance of BBN. Additionally, Back AL, et al (USA) reported a significant improvement in BBN knowledge after an interventional workshop [21]. Similarly a randomized control trial carried out in France among resident physicians found significant improvement in the rates of emotional and social support were found among trained physicians compared with untrained residents [22]. Moreover, the British General Medical Council recommended teaching and training in BBN and communication skills for undergraduate medical students and in general practice [23]. The findings of the current study may raise a concern about the quality and effectiveness of current training programs of BBN both at undergraduate and in-service levels.

Mostly, delivering bad news is perceived as a difficult task by physicians which mandates the presence of specific skills [15]. In the present study, only 31 % of physicians consider themselves as highly competent in BBN, whereas it was considered low among 15% of them and moderate among more than half (54%). Higher figures have been observed in another similar Saudi study where the perceived level of competence of BBN skill was high among 40.3% of the physicians and low among 15.1% [15].

There were several factors correlated positively to perceived level of competence in BBN by the participants in this study. Being non-Saudi physicians, more experienced, consultant and low work load were associated with higher level of competence in BBN. Additional factor was the type of specialty, as ophthalmologists and pediatricians were more competent concerning delivering bad news than their counterparts. Other surveys reinforced this correlation too, but with different specialty. In one study in Riyadh, KSA found that performance and skills in BBN were better among oncologists than others [5]. Also an Egyptian study found family physicians' performance was better in BBN compared to other specialties [24]. In another study conducted in Brazil [25], level of competency for BBN was also correlated with physicians' specialty and experience agreeing with the current study findings.

The attitude towards BBN in this study was high among almost two-thirds of physicians, with no differences between them according to socio-demographic characteristics, previous training experience or specialty. However, physicians who had low work load were found to have better attitude towards BBN.

CONCLUSION

Knowledge of the physicians working at the two main governmental hospitals, belonging to Ministry of Health in Dammam was poor to fair among the majority. Specialists were the most knowledgeable group of physicians compared to consultants and residents. However, the majority showed moderate to high level of perceived competence and positive attitude toward BBN. Several factors were associated with high level of competence like being non-Saudi physicians, more experienced, consultant, low work load and certain specialties like being ophthalmologists and pediatricians.

Study Strength

The study defined several factors associated with poor knowledge, suboptimal perceiving of competence and attitude of BBN among physicians, which could help in organizing and planning interventional programs to improve the current practice.

Study Limitation

Limitations of the present study include the utilization of a self-administered questionnaire which might lead to over or under estimation of the situation and the cross sectional design of the study which did not prove the temporal association between compared variables.

Recommendations

According to the study results, we recommended the following

1. Encourage the use of BBN guidelines and standard tools in all secondary care hospitals and enforce its use through clinical auditing and planning.
2. Reconsider and evaluate the quality and efficacy of in-service training interventions for hospital physicians in BBN.
3. Reconsider the quality of undergraduate training in BBN and enforce it with practical sessions.
4. Further direct observational studies are recommended to assess the physicians' actual level of performance in BBN.
5. Conducting further studies to evaluate patients' satisfaction with BBN in secondary and primary health care facilities.

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