

Male Infertility as a Bad News A review

by Fahmi Bahar

Submission date: 21-Jun-2020 03:01PM (UTC+0800)

Submission ID: 1347290400

File name: Male_Infertility_as_a_Bad_News_A_review.pdf (431.56K)

Word count: 3508

Character count: 18104



Male Infertility As A Bad News: A Review

Fahmi Bahar^{1*}, Putri Zalika², Silvia W Lestari^{1,3}, Hamdani Lunardhi⁴, Reny Ptishom⁴, Tjahjo Djojo Tanojo⁵

¹ *Andrology Specialist Program, FM Universitas Airlangga, Surabaya, Indonesia.*

² *Medical Education Unit, FM Universitas Muhammadiyah, Palembang, Indonesia.*

³ *Medical Biology Department, FM Universitas Indonesia, Jakarta, Indonesia.*

⁴ *Medical Biology Department, FM Universitas Airlangga, Surabaya, Indonesia.*

⁵ *Andrology Staff, Dr. Soetomo General Hospital, Surabaya, Indonesia.*

*Corresponding Author: Fahmi Bahar

Abstract

Having children is a dream for every married couple. However, this process is not that easy for 15% couples worldwide who suffer infertility. Infertility is the failure to achieve a clinical pregnancy after twelve months of regular and unprotected intercourse. Half of infertility causes come from the man called male infertility. Male factors of infertility vary greatly from mild one like oligozoospermia to severe one like extreme oligozoospermia which make the natural pregnancy difficult to happen, hence a help from assisted reproductive technology is needed. In more extreme case like testicular agenesis, having children really becomes a necessity and it will bring bad news to him. Bad News (BN) refers to a condition of hopelessness, threatening life and body or anything which raises the patients' anxiety about his future. In this case, male infertility can be categorized as BN since it causes loss of hope and anxiety. The process of Breaking Bad News (BBN) requires good communication skill. There were several BBN protocols formulated previously covering Advance preparation, Build relationships, Communicate well, Deal with the patient, Encourage emotion (ABCDE), Background, Rapport, Explore, Announce, Kindling, Summarize (BREAKS) and Settings, Perception, Invitation, Knowledge, Empathy, Strategy (SPIKES). Each protocol had been applied to other medical fields such as oncology, pediatric etc. Whilst its application on male infertility cases has never been published. Even if this protocol is able to be applied properly, it is capable to increase the patients' knowledge, improve their psychological condition and maintain the threshold of hope for having children.

Keywords: *Male Infertility, Communication, Bad News, Breaking Bad News*

Introduction

One of the purpose of marriage is to obtain offspring, which needs an optimal condition of reproductive organs from both partners. However, this process is not as easy as it seems. Around 8 - 12 % of the couple in reproductive age all over the world experience the condition called infertility, the inability to achieve a clinical pregnancy after twelve months of regular and unprotected intercourse for one year [1].

Infertility can be caused by the male, the female, or both of them. This condition surely is not a good news. Moreover, if the failure is caused by only male or female factors, then this will become a very bad news which is difficult to be accepted. The infertility condition which is caused by the male factor, is called as male infertility and this factor contribute up to 40% of all infertility cases [2].

Bad news (BN) is a condition where there is lack of hope, which threatens body and soul, and anything that develop anxiousness of the patient towards his own future. The male infertility condition can be categorized as a bad news, although it is not a body and soul-threatening case such as metastatic cancerous lesions. This condition will causes to feel that they have already lost their hope and worrying his future as they are threatened to be unable to obtain their own biological child. The delivery of bad news from the doctor to the patients' needs a special communication method which is called as Breaking Bad News (BBN) [3].

Based on previous publications, there are some protocols which were commonly used at BBN. They were Advance preparation, Build relationship, Communicate well, Deal with patient's reactions, Encourage emotion (ABCDE) [4]; Background, Rapport, Explore, Announce, Kindling, Summarize (BREAKS) [5]; and Settings, Perception, Invitation, Knowledge, Empathy, Strategy (SPIKES)[6].

There was no special protocol of the BBN developed for male infertility case, and moreover, there was even no study found about the implementation of one of these three protocols mentioned in this case. Therefore, this literature review attempts to discuss the provided BBN protocols if they are implemented for the male infertility case.

Methods

We used literature review as method. It obtained from surfing PubMed, Google Scholar and others with the keywords "infertility", "male infertility", "bad news", "breaking bad news" and "communication". We selected the most suitable articles, from 1999 to 2018 that have the relevance with this paper.

Male Infertility

It is estimated that 15% couples in their childbearing age all over the world suffers from infertility and half of them are caused by the male factors [7,8]. The minor male factors such as low spermatozoa concentration, low motility and poor morphology, while the major male factors is azoospermia. The etiology of azoospermia is broadly divided into three, in which due to

pre testicular, intra testicular and post testicular problems. Problems that occur in pre and post testicular cases are possible to be cured through drug therapy and surgery, while intra testicular problems are generally irreversible as the damage of testicular tissue is permanent, so that spermatozoa cannot be produced at all. It refers to a very extreme situation in the case of male infertility, so that the chance of having a biological child become difficult to materialize or even impossible [9].

Male Infertility and Its Bad News

Bad news is not something exciting for the patients, so does for the doctor who deliver it. Bad news in medical field is often identified as a life-threatening illness in an acute condition like patients in emergency department [10] or a disease that makes the chance of surviving is very limited like a final-stadium cancer [11].

As it is based on the definition, bad news is not only related to the things threatening the body and soul, but also the condition which causes patients' anxiety about his future, or abolish their expectations [12,13]. For instance, male infertility in which the patient will think that his future is gloom with small or no possibility of having a biological child [14].

In the cases of mild male infertility, even though the opportunity of having a biological child is still widely opened, the process towards it cannot be said as an easy thing to do. The processes of diagnosis and therapy require high cost and it is very time-consuming. And, alas, most insurance is not willing yet to cover these costs [15].

Whereas, in the case of severe male infertility, even though the patients are patient enough to wait for the process and have a big-budget to perform all procedures, even up to Intra Uterine Insemination (IUI), In Vitro Fertilization (IVF) or Intra Cytoplasmic Sperm Injection (ICSI), the success rate is still quite low, as it is around 30% [16]. Thus, there is no 100% guarantee of success for having a biological child after going through all the most sophisticated procedures.

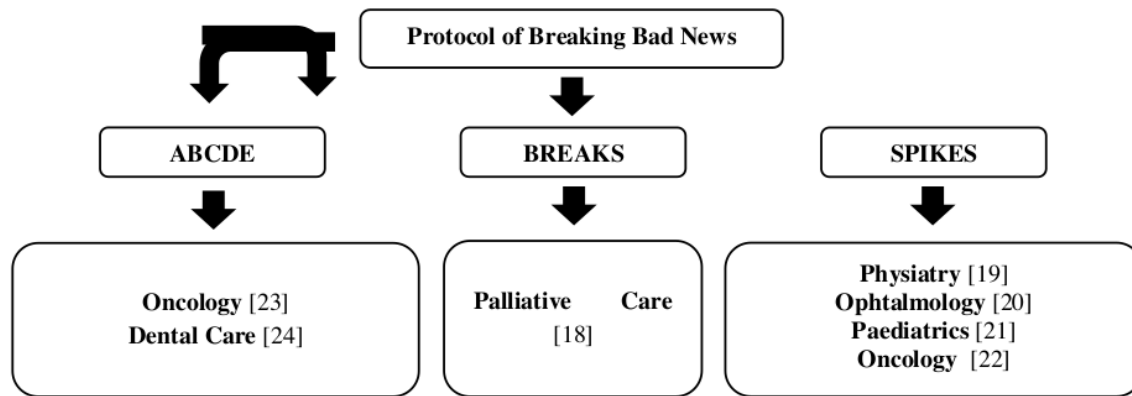


Figure 1: Protocols of BBN and its previous applications

27

Breaking Bad News

Breaking bad news is a special communication method to convey bad news that usually occurs in a doctor-patient relationship. Since bad news is not an interesting thing to talk about, the process of delivering it by the doctor to the patients becomes a complicated thing to do [17].

The BBN process requires not only good communication skill from the doctor, but also the integration of the ability to respond to the patient's emotional reaction, the ability to deal with the stress experienced by the patient, the involvement in the decision that will be taken by the patients and how to deal

with the dilemma when they try to give a glimmer of hope in the middle of gloomy condition [6]

24

The ability to deliver bad news can be enhanced by understanding the phases involved in the process and then approaching it by making step by step in protocols that promotes the principles of communication and counselling. Based on the previous publications, several protocol that are commonly used in BBN along with its application on the previous clinical fields were shown on Figure 1.

Table 1: Application of ABCDE in male infertility case

Advance preparation	At the first visit, the doctor must explore how long the patient waited for having a biological child and the efforts he had made so far. At the next visit, if the patient's clinical data on the results of the history, physical examination, semen analysis and laboratory analysis etc. that had been obtained showed less favourable results, it is recommended for patient to come with his wife or family.
Build relationship	The doctor must try to establish relationship with patient, prepare sufficient time and a comfortable place by setting a sitting position close enough so that gesture, eye contact and touch (if needed) could be a means of communication in conveying the infertile diagnosis experienced. If the patient came with his wife, then a three-way relationship must be fostered.
Communicate well	Speak straight-forwardly (for example: "it's very difficult to convey, but it seems like your chance to have a biological child is very small"). Avoid acronyms and medical jargon such as IVF or ICSI. Let a moment of silence provided an opportunity for the patient to digest the information we conveyed and asked the patient to repeat the information conveyed to ensure his understanding.
Deal with reactions	Assessing the reactions of the patient and/or his partner, could the patient immediately accept the condition of the male infertility he had experienced or was the patient still in the denial phase? In this phase the doctor must listen more and show empathy for the patient.
Encourage emotion	Doing an evaluation of the bad news effects that we conveyed to patient. Preparing the next plan for the patient, whether the couple could be helped with IUI or IVF, or needed to be referred to another colleague regarding further management.

Breaking Bad News in Male infertility Case

According to our knowledge, there is no publication had been found regarding specific protocols for BBN in male infertility case so

far. This is the first publication that tried to combine 2 or 3 protocols according to our needs when dealing with patient with male infertility case as explained in Tables 1 to 3.

Table 2: Application of BREAKS in male infertility case

Background	The doctor must know the patient's background and estimate the extent to which the patient would ask about his infertility condition. Maybe not all questions could be answered, but everything that could cause harm to the patient must be able to be resolved by a doctor. Even sociocultural backgrounds must be considered. In certain ethnic groups, having offspring is a necessity, not to mention the "obligation" to have a biological child with certain gender.
Rapport	Building a good relationship was necessary for the continuity of the doctor-patient relationship. The patient's comfort made them more open to talk. To find out the condition of the patient could be done by giving open questions for example "what are the efforts that you have done so far to get offspring?"
Explore	To begin the delivery of bad news, it could be started by knowing what the patient knew about his condition. Some patients came with the condition in which they already knew the diagnosis, and some others did not even know anything. For the first case, it might be easier because the patient was already in the acceptance phase, for example, a patient who already knew that he had very low sperm concentration then we could convey this bad news as well as the IUI therapy plan or IVF. While in the second case, we must explore more deeply and be prepared if it turns out that the patient is doing a denial of the bad news we delivered.
Announce	Bad news could be delivered with a little euphemism at the beginning so that the end effect was not like an explosive bomb, for example: "In fact, I also expect the results of a better hormonal examination than this, but the reality say something else" All expressions of the patient must be captured by the doctor so that the patient knew that the doctor was watching him.
Kindling	When the bad news had been delivered, the reactions of patients could vary, some remain silent, cry or even angry. After that, the patient might not fully listen to the doctor's words. In this phase the doctor must ensure that the patient was still paying attention, for example by asking the question "are you still with me?"
Summarize	In this final stage, the doctor must conclude everything he had said and the patient's response. The conclusion could be written because usually patients found it difficult to understand if they were in a state of confusion. Not less important, make sure the patient went home safely, do not let the patient drive alone. The patient might be able to do a suicide if he really felt desperate.

Discussion

Male infertility is one of the bad news examples experienced by couple on their struggle to conceive an offspring. Furthermore, in the extreme case like azoospermia the possibility to have a biological child is very small and the husband as the main causative factor would feel very depressed. But, our way to deliver the bad news could determine the effect that would be felt by the patients. In the previous publication, there are some protocols, to

deliver bad news, that were ABCDE, BREAKS, and SPIKES. The protocols were often implemented in other clinical field, but it had not been implemented in male infertility case, resulting the needs of a discussion and further research. As seen in the tables, BBN protocols were essential to be implemented in male infertility case to increase the patients' knowledge about their condition, improve their psychological conditions and raising their threshold of hope to get offspring.

Table 3: Application of SPIKES in male infertility case

Setting	Starting by preparing a room and involving somebody else, in this case the spouse (wife). Always made an eye contact with the patient and occasionally touched the patient's body (if the patient was comfortable with this treatment).
Perception	Before delivering, trying to ask questions. The questions were in the form of open questions, for example: "You may have a little peek at the result of semen analysis that you just took from the laboratory. What do you think about the result?" so that it obtained the patient's perception about his condition (similar to the Rapport phase of the BREAKS Protocol).

Invitation	Not every patient wanted to know all the details about their illness, some just wanted to know the surface. In this phase, we explored how far the patient wanted to know. For instance, if the patient brought the result of semen analysis, then we could ask: "how far do you want to know the result of this analysis? Do I need to explain in detail or just in a brief sketch?"
Knowledge	BBN was not only about delivering bad news, but also about giving knowledge and understanding to the patient about their condition. The general assumption in the society was that the fertility was only caused by a man side. This was where the role of a doctor to deliver the fact related to this was needed so that the patient knew that both of them could be the cause.
Empathy	When the patient got the bad news we conveyed, the response could vary. In this situation, a doctor could give a support and solidarity by showing the response of empathy, for example: "if this happened to me, I would also feel heavy; I understand how disappointed you knowing that your opportunity to have a biological child is almost closed"
Strategy & summary	A patient with a mature long-term treatment planning would experience less anxiety. All of the possible therapies in the fertility case must be explained to the patient, starting with the simple one like oral therapy for the improvement quality of the sperm to the IVF or ICSI treatments for severe cases.

Conclusions

In conclusion, BBN protocol is needed in male infertility, especially in extreme cases. Furthermore, the cooperation between other

medical disciplines knowledge should be conducted to increase the skill of BBN protocol implementation in male infertility cases.

References

- Inhorn MC, Patrizio P. Infertility around the globe: new thinking on gender, reproductive technologies and global movements in the 21st century. *Hum Reprod Update*. 2015;0(0):1–16.
- Thomas SC. Exploring Literature for Conceptualisations of Male Infertility: A Phenomenological Analysis Exploring Literature for Conceptualisations of Male Infertility: A. *Qual Rep*. 2018;23(4):978–1000.
- Monden KR, Gentry L, Cox TR. Delivering bad news to patients. In: *Baylor University Medical Centre Proceedings*. 2016. p. 101–2.
- Rabow MW, Mcphee SJ. Beyond breaking bad news: how to help patients who suffer. *West J Med*. 1999;171(October):260–3.
- Narayanan V, Bista B, Koshy C. 'BREAKS' Protocol for Breaking Bad News. *Indian J Palliat Care*. 2010;16(2):61–5.
- Baile W, Lenzi R, Kudelka AP. SPIKES - A Six-Step Protocol for Delivering Bad News: Application to the Patient with Cancer. *Oncologist*. 2000;5(February 2014):302–11.
- Agarwal A, Mulgund A, Hamada A, Chyatte MR. A unique view on male infertility around the globe. *Reprod Biol Endocrinol*. 2015;13(37):1–9.
- Borghet M Vander, Wyns C. Fertility and infertility: Definition and epidemiology. *Clin Biochem*. 2018;(March).
- Cocuzza M, Alvarenga C, Pagani R. The epidemiology and etiology of azoospermia. *Clinics*. 2013;68:15–26.
- Güven R, Kaykısız EK, Öntürk H, Sasmaz MI, Ari A, Eyüpoglu G, et al. Breaking Bad News in The Emergency Department: How do The Patients Want it. *Eurasian J Emerg Med*. 2018;17(3):97–102.
- Rao A, Sunil B, Ekstrand M, Heylen E, Raju G, Shet A. Breaking Bad News: Patient Preferences and the Role of Family Members when Delivering a Cancer Diagnosis. *Asian Pasific J Cancer Prev*. 2016;17:1779–84.
- Vandekieft GK. Breaking Bad News. *Am Fam Physician*. 2001;64:1975–8.
- Ahmady AE, Sabounchi SS, Mirmohammadsadeghi H, Rezaei A. A Suitable Model for Breaking Bad News: Review of Recommendations. *JMED Research*. 2014;2014.
- Sarkar S, Bhowmik DK, Syed SJ. Evaluation of Male Factors Contributing Infertility. *Glob J Res Anal*. 2017;06(10):7–12.

- 10
15. Dupree JM. Insurance coverage for male infertility care in the United States. *Asian J Androl.* 2016;18(January):339–41.
16. Leone D, Borghi L, Negro S² Del, Becattini C, Chelo E, Costa M, et al. Doctor – couple communication during assisted reproductive technology visits. *Hum Reprod.* 2018;(April):1–10.
17. Naseem S. “ Breaking breast cancer news ” with ethnic minority: a UK experience. *J Multidiscip Healthc.* 2018;11:317–22.
18. Kumar SP, D’souza M, Sisodia V. Interpersonal Communication Skills and Palliative Care: “Finding the Story Behind the Story.” *Indian J Palliat Care.* 2014;20(1).
19. Ozyemisci-taskiran O, Coskun O, Budakoglu II, Demirsoy N. Breaking bad news in spinal cord injury ; a qualitative study assessing the perspective of spinal cord injury survivors in Turkey. *J Spinal Cord Med (Internet).* 2017;1–8. Available from:<http://dx.doi.org/10.1080/10790268.2017.1311463>.
- 6
20. Hilkert SM, Cebulla CM, Jain SG, Pfeil SA, Benes SC, Robbins SL. Breaking Bad News: A Communication competency for Ophthalmology Training Program. *Surv Ophthalmol (Internet).* 2016; Available from: <http://dx.doi.org/10.1016/j.survophthal.2016.04.005>
- 5
21. Havermans T, Tack J, Vertommen A, Proesmans M, Boeck K De. Breaking bad news , the diagnosis of cystic fibrosis in childhood. *J Cyst Fibros [Internet].* 2015;14(4):540–6. Available from: <http://dx.doi.org/10.1016/j.jcf.2014.12.005>
22. Seifart C, Hofmann M, Bär T, Knorrenschild JR, Seifart U, Rief W. Breaking bad news – what patients want and what they get: evaluating the SPIKES protocol in Germany. *Ann Oncol.* 2014;25(February 2014):707–11.
23. Konstantis A, Exiara T. Breaking Bad News in Cancer Patients. *Indian J Palliat Care.* 2015;21(1):35–8.
24. Guneri P, Epstein J, Botto RW. Breaking bad medical news in a dental care setting. *J Am Dent Assoc (Internet).* 2013;144(4):381–6. Available from: <http://dx.doi.org/10.14219/jada.archive.2013.0131>

Male Infertility as a Bad News A review

ORIGINALITY REPORT

16%

SIMILARITY INDEX

13%

INTERNET SOURCES

11%

PUBLICATIONS

3%

STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Universitas Airlangga Student Paper	2%
2	journal.opted.org Internet Source	2%
3	biomeddefine.com Internet Source	1%
4	blog.cytoplan.co.uk Internet Source	1%
5	Scott C Bell, Marcus A Mall, Hector Gutierrez, Milan Macek et al. "The future of cystic fibrosis care: a global perspective", The Lancet Respiratory Medicine, 2020 Publication	1%
6	www.thieme-connect.com Internet Source	1%
7	mafiadoc.com Internet Source	1%
8	www.indianpediatrics.net Internet Source	1%

9	Mark Eldon Harrison, Anne Walling. "What Do We Know About Giving Bad News? A Review", <i>Clinical Pediatrics</i> , 2010 Publication	1%
10	health.mil Internet Source	1%
11	www.scribd.com Internet Source	1%
12	Michel D. Wissing, Simone Chevalier, Ana O'Flaherty, Ginette McKercher et al. "Psychosocial adjustment to a prostate cancer diagnosis in a cohort of radical prostatectomy patients in Quebec, Canada", <i>Psycho-Oncology</i> , 2019 Publication	<1%
13	Priyanka Bearely, James T. Rague, Robert D. Oates. "Fertility Preservation in the Transgender Population", <i>Current Sexual Health Reports</i> , 2020 Publication	<1%
14	www.blossomivfindia.com Internet Source	<1%
15	www.jpalliativecare.com Internet Source	<1%
16	Paul Barrière, Catherine Avril, Amel	<1%

Benmahmoud-Zoubir, Nathalie Bénard, Sylvie Dejager. "Patient perceptions and understanding of treatment instructions for ovarian stimulation during infertility treatment", Reproductive Biomedicine & Society Online, 2019

Publication

17	www.onlinelibrary.wiley.com Internet Source	<1%
18	discovery.ucl.ac.uk Internet Source	<1%
19	hdl.handle.net Internet Source	<1%
20	www.researchsquare.com Internet Source	<1%
21	bioethics.com Internet Source	<1%
22	cms.galenos.com.tr Internet Source	<1%
23	link.springer.com Internet Source	<1%
24	repositorio.unicamp.br Internet Source	<1%
25	patient.info Internet Source	<1%

26	www.magonlinelibrary.com Internet Source	<1%
27	www.rjme.ro Internet Source	<1%
28	Guilhem Bousquet, Massimiliano Orri, Sabine Winterman, Charlotte Brugière, Laurence Verneuil, Anne Revah-Levy. "Breaking Bad News in Oncology: A Metasynthesis", Journal of Clinical Oncology, 2015 Publication	<1%
29	repository.unair.ac.id Internet Source	<1%
30	eprints.kmu.ac.ir Internet Source	<1%

Exclude quotes On

Exclude matches Off

Exclude bibliography On

Male Infertility as a Bad News A review

GRADEMARK REPORT

FINAL GRADE

/100

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6
