

Original Article

Informed Consent for Blood Transfusion: Physicians' Perceptive at a Tertiary Healthcare Hospital

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ABSTRACT

Blood transfusion have the potential to save lives and frequently provide considerable benefits, but it has associated risks. Notwithstanding, the process of obtaining permission for blood transfusion may not be done satisfactorily.

The study was carried out to evaluate physicians' opinion, attitude and practice of the transfusion consent process at Federal Medical Centre, Yenagoa, Bayelsa State, Nigeria. Physicians from distinct departments were beckoned to fill out an unidentified questionnaire on transfusion consent. A total of 141 physicians replied to the study. More than 90% of the participants acknowledged the significance of the transfusion consent process. An aggregate of 123 (87.2) participants had prescribed blood, out of which 119 (84) obtained informed consent before blood transfusion. The advantages and hazards of blood transfusion was interpreted routinely by 108(90.8) and 81(68.1) of the study participants, respectively. Contrarily, a lower proportion of the participants 56(47.1) explained the available options to blood transfusion. The likelihood to decline consent after receiving education on blood transfusion was the most identified limitations to the practice of informed consent in transfusion at the studied institution. This study demonstrates decisive perspective of the evaluated physicians on the value of transfusion consent. Nonetheless, strategies should be set up to ensure that options to blood transfusion are included systematically in the transfusion consent process.

Keywords: Blood transfusion, Physicians, Informed consent, Transfusion consent

INTRODUCTION

Informed consent is 'a person's agreement with a recommended medical procedure with full knowledge of the risk involved and the alternatives. It must be voluntarily obtained, without evidence of coercion.'¹

Blood transfusion is an important procedure in medical practice and is usually considered safe in comparison to other medical and surgical interventions, they nevertheless carry certain risks, such as transfusion reactions, alloimmunisation, immunomodulation and transfusion-transmitted infections.²

With the increasing recognition of the hazards of blood transfusion, informed consent prior to blood transfusion has become progressively significant. As such, patients receiving blood transfusions should be provided with adequate knowledge regarding the reasons, expected gains including the consequences of not having the transfusion; the substitutes to transfusion, which may include the possibility of an autologous transfusion and the dangers associated with transfusion. Patients should also be given the opportunity to ask questions and should be informed of their right to refuse a transfusion.^{3,4,5,6} There has been considerable debate within the field of transfusion

medicine internationally regarding the use of informed consent before blood transfusions. In the US, written informed consent is required while in the UK, there is a general acceptance of the need for IC, although not routinely practiced^{6,7,8} In Africa including Nigeria, informed consent is an enforceable right to healthcare but generally reported to be poorly implemented.^{1,9,10,11}

The aim of this research is to examine the perception and practice of informed consent from patients before blood transfusion amongst physicians at a tertiary health institution in Nigeria. Specific objectives include: to ascertain the opinion of doctors on obtaining specific consent for blood transfusion; to determine the perception of physicians on the type of information to be provided to patients' prior to obtaining consent for transfusion; to elucidate the practice of informed consent amongst physicians and ascertain limitations to this practice.

Knowledge on the current perceptions and practice of informed consent amongst physicians may aid to identifying the limitations in this practice and proffer possible solutions. These solutions may include providing a guide in developing a transfusion consent policy and reveal a need for retraining of health professionals in this field to improve transfusion practice in Nigeria.

MATERIALS AND METHODS

This was a prospective cross-sectional study carried out at the Federal Medical Centre (FMC), Yenagoa, Bayelsa State, a tertiary health centre located in the South-South region of Nigeria and offers services to the indigenes around this area and beyond. It is a 425 bedded hospital with over 2000 staff members.

Physicians from separate cadres: consultants, residents, house officers and medical officers were invited to complete a paper-based questionnaire. The questionnaire introduction included the nature and purpose of the study, the anonymity of the survey and the voluntary nature of participation. Survey questions and statements inquired into the following areas: demographics, understanding of informed consent, informed consent practices, challenges to obtaining consent, and attitudes regarding informed consent.

The study was approved by the Federal Medical Centre, Yenagoa ethics committee.

Inclusion criteria were physicians working at different cadre in the hospital: house officers, residents, consultants and medical Officers working at the clinical departments (Internal medicine, Paediatrics, Surgery, Obstetrics &

Gynaecology, Anaesthesia, and Ear, Nose & Throat). Exclusion criteria include: House Officers who have not completed at least two clinical rotations of approximately 24 weeks and doctors who were not actively working at the clinical departments. Individuals provided consent by completing the questionnaire. Before distribution, the survey was piloted with seven consultants, five residents and two medical officers. Modifications were made based on their feedback.

Demographic data and level of training were analysed using descriptive statistics (Excel; Microsoft, Redmond, WA). Similarly, data regarding current practices when obtaining consent for blood transfusion, attitudes regarding obtaining informed consent also used only descriptive statistics.

RESULTS

In total, 141 physicians participated in the study and most of the respondents were between the thirtieth to the fortieth decade. Resident doctors formed the highest population of participants as shown in table 1. Most of the physicians assessed had practised for more than five years (Table 1).

The attitude of physicians on informed consent for blood transfusion

Majority of the participants 139 (98.6) were of the opinion that informed consent should be obtained prior to blood transfusion and this was observed in all the cadres of physicians as seen in figure 1 and table 2 respectively.

An aggregate of 138 (97.9) of the participants agreed that blood transfusion recipients should be educated on the benefits, risks and alternatives to blood transfusion as illustrated in table 3.

Participants were more inclined to physicians being responsible for obtaining informed consent 92(56.8) while only 31 (19.1) agree that any other health practitioners can perform this role.

Informed consent is best obtained in the written form as highlighted by 118(83.7) of the study participants (Figure 2). Most of the physicians n(91.5) agreed that obtaining informed consent before blood transfusion should be made mandatorily.

Practice of informed Consent

Out of the 123 participants who have prescribed blood, 119 (86) obtained consent prior to blood transfusion as shown in figures 3 and 4 respectively.

Table 1 Sociodemographic Distribution of respondents at FMC Yenagoa

Variables	Frequency (n = 141)	Percent (%)
Age group		
20 - 30 years	39	27.7
30 - 40 years	69	48.9
40 - 50 years	30	21.3
Above 50 years	3	2.1
Gender		
Male	81	57.4
Female	60	42.6
Designation		
House officer	27	19.1
Junior resident	45	31.9
Senior resident	41	29.1
Consultant	10	7.1
Medical officer	18	12.8
Duration of practice		
< 1 year	26	18.4
1 to 5 years	39	27.7
5 to 10 years	44	31.2
Above 10 years	32	22.7

Table 2: Response from the different cadre of physicians on their opinions on the need for informed consent for blood transfusion at FMC Yenagoa

Rank	Is informed consent needed		Chi-square (p-value)
	Yes	No	
House officer	26 (18.70)	1 (50.0)	2.20 (0.697)
Junior resident	44 (31.7)	1 (50.0)	
Senior resident	41 (29.50)	0 (0.0)	
Consultant	10 (7.20)	0 (0.0)	
Other	18 (12.90)	0 (0.0)	
Total	139 (100.0)	2 (100.0)	

Distribution is not statistically significant ($p > 0.05$).

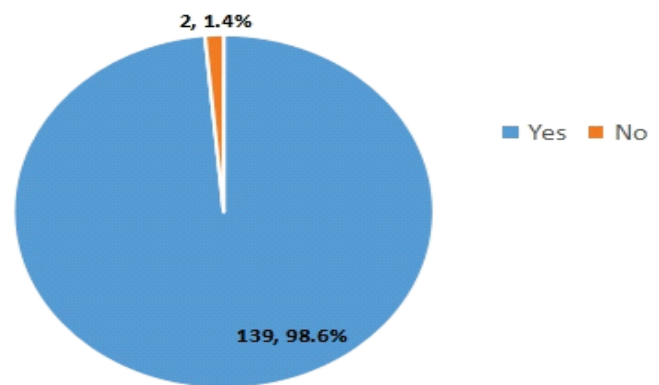


Figure 1: Is informed consent needed for blood?

Table 3: Perception of physicians on the type of information to be provided before obtaining informed consent at FMC Yenagoa

Questions	Yes (%)	No (%)	No Response (%)	Total
Do you think recipients or parents/ authorized legal guardians (for minors) of blood transfusion should be educated on the benefits of the procedure before obtaining consent	138 (97.9)	3 (2.1)	0 (0.0)	141 (100.0)
Do you think recipients or parents/ authorized legal guardians (for minors) of blood transfusion should be educated on the risks of the procedure before obtaining consent	137 (97.2)	4 (2.8)	0 (0.0)	141 (100.0)
Do you think recipients or parents/ authorized legal guardians (for minors) of blood transfusion should be educated on the alternatives of the procedure before obtaining consent	131 (92.9)	7 (5.0)	3 (2.1)	141 (100.0)

Table 4: Obtaining consent and the type of information provided among respondents at FMC Yenagoa

	Yes (n, %)	No (n, %)	Total (n, %)
Explain the benefits of blood transfusion when taking transfusion consent	108 (90.8)	11 (9.2)	119 (100.0)
Explain the risks of blood transfusion when taking transfusion consent	81 (68.1)	38 (31.9)	119 (100.0)
Explain the alternatives of blood transfusion when taking transfusion	56 (47.1)	63 (52.9)	119 (100.0)

Table 5: Limitations of informed consent among respondents at FMC Yenagoa

Perceived limitations	Frequency	Percent
May increase the likelihood to withdrawal of consent	76	34.2
Illiteracy	41	18.3
Language barrier	37	16.6
Not enough time to educate the recipients	58	26.0
Inadequate knowledge on blood transfusion by the physician.	7	3.1
No Response	4	1.8
Total	223	100.0

Note: Multiples responses apply

Most of the participants 108(90.8) who obtained consent explained the advantages of blood transfusion while only 56(47.1) of the participants educated the recipients on the substitutes to blood transfusion as shown in table 4. The likelihood of the recipient to decline consent after being educated on the benefits, risks and alternatives of blood transfusion 76 (34.2), illiteracy 41(18.3) and limited time for the physicians to educate the recipients 58 (26) were some of the identified limitations to the practice of informed consent in Nigeria (table 5)

DISCUSSION

In these modern generations, there has been a transformation towards patient association in medical treatment. Notwithstanding, there are disparities in the literatures regarding the method of attaining consent for blood and blood components transfusion.^{6,7,8,12}

Our data shows a superlative physicians' viewpoint of informed consent before blood transfusion as reported in other studies.⁵ The majority of the studied physicians acknowledged the priority of the transfusion consent process. The level of significance inclined to this process was regardless of the physicians' rank. This could signify an increase in the physicians' awareness of patients'

autonomy with regard to medical treatment in general or the importance of obtaining informed consent from a medico-legal perspective. Most of the assessed physicians thought the process of educating the recipients of blood transfusion on the benefits, risks and alternatives of blood transfusion was significant and added to the patients' knowledge as observed in other studies.⁵

The medical code of ethics stipulate that a patient is required to give informed consent before being administered any form of blood therapy. It is also expected that the physician under whom recipient receives blood therapy is responsible for providing adequate information to enable the patient to make an informed decision as declared by most participants in this study.¹¹ The survey showed that most of the physicians obtained consent before blood transfusion. Drawbacks in conferring the substitutes to blood transfusion was observed as seen in most studies, and raises a need to address the reasons behind this finding and the physicians' awareness of alternatives. This will also guide strategic planning on focussed training of physicians on known alternatives across all groups of the profession. Alternatives to blood transfusion include autologous donation, directed donation, drug therapy, intraoperative salvage of blood and non treatment.¹²

A valid process of informed consent requires four things:

voluntariness, disclosure (the clinician's sharing of information relevant to the patient's decision), understanding (appreciating the risks, benefits, and alternatives of the procedure), and capacity (the ability to engage in reasoned deliberation, comparing the risks and benefits of the procedure with personal life goals). Factors that influence capacity are patient-related, information-related and communication-related. Some patient related factors that influence capacity include: language and cultural barrier, and patients who may not have the educational attainment or intellectual ability to understand the choices before them. Some of these factors were also identified as limitations to obtaining informed consent in this study.^{13,14,15}

Obtaining separate informed consent for blood transfusion is mandatory in some countries, but studies does not suggest this happens routinely in Nigeria.^{11,16} Findings in this study showed that physicians advocate that the transfusion consent process be made compulsory. A larger study may be required to validate these findings.

CONCLUSION

This study showed a clear point of view of the assessed physicians on the influence of transfusion consent. Though, there may be a need to set up strategies to ensure that transfusion recipients' are educated on the substitutes to blood transfusion.. The survey results also highlights the influence of enforcing hospital blood transfusion policy inclusive of transfusion consent process in Nigeria.

Recommendations

The intensity of patients' understanding to administered knowledge by the physicians has not been explored in our study and sets the ground for further assessment.

Limitations

The inference from this study may be limited since study participants was from a single institution.

Acknowledgement

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Conflict of interest

None

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