INFORMED CONSENT IN TEENAGE PREGNANCY: DOCTORS' KNOWLEDGE, ATTITUDES AND PRACTICES AMONGST ANAESTHESIOLOGISTS AND OBSTETRICIANS IN SEVEN KWAZULU-NATAL HOSPITALS.

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Abstract Background

Teenage pregnancy is a global phenomenon. Informed consent practice regarding the sexual and reproductive rights of teenagers may be hampered by physicians' lack of knowledge or attitude. The study aimed to assess the knowledge, attitudes, and practices of doctors in the process of obtaining informed consent from pregnant teenage patients in seven government-funded hospitals in KwaZulu-Natal.

Methods

A prospective, descriptive, observational study using a self-administered questionnaire was conducted amongst doctors working in Anaesthesia and Obstetrics and Gynecology, from 15 October 2021 to 30 November 2021.

Results

A total of 169 doctors participated in the study, 62.7% from anesthesia and 37.3% from Obstetrics and Gynaecology. Most doctors lacked knowledge regarding the Children's Act No. 38 of 2005 and the Choice on Termination of Pregnancy Act No. 92 of 1996. Approximately 18% of doctors reported obtaining consent for any medical intervention in teenage pregnant patients solely from their parent(s) or guardian, irrespective of the patient's mental or legal capacity. A fifth (19.5%) of doctors reported that interns were responsible for obtaining informed consent without supervision. Most doctors disclose legally required information in the language the pregnant teenage patient understands, with the assistance of a translator if required. Some doctors revealed paternalistic views regarding teen pregnant patients' right to choose medical intervention available.

Conclusion

The study found that although doctors met the general legal requirements for informed consent, in most cases, they lacked core knowledge of the relevant acts and laws for sexually active teenagers, thus affecting the validity of the informed consent process.

Recommendation

This could be improved by focusing on filling this knowledge gap at both an undergraduate and postgraduate level as well as a review of the laws/acts that pertain to this population group.

Keywords: Informed Consent, Teenage Pregnancy, Knowledge, Practices, Doctors, Children's Act, Choice on Termination of Pregnancy Act.

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Introduction

Teenage pregnancy is a global public health concern and leads to health, social, and economic inequity. Low- and middle-income countries (LMIC) bear the most burden, (1)

with one in three teenagers in South Africa reporting pregnancy and a third not returning to school. (2,3) Teenage pregnancy is defined by The United Nations International Children's Emergency Fund (UNICEF) as a girl aged 13-19 becoming pregnant. (2,4) In South Africa,

adolescents are 10-19 years old, and a child is any person less than 18 years old. (5, 6) The terms 'teenage', 'adolescent', and 'child' can be confusing, with different meanings depending on the country or context.

The South African constitution protects children's health and reproductive rights, allowing them to consent to medical Page | 2 treatment independently for children aged 12 and above. However, according to the Children's Act No.38 of 2005 (CA), surgical procedures require parental assistance. (7) Pregnant children's rights are further protected with regards to termination of pregnancy (TOP), which does not have a minimum age requirement or the need for parental assistance, according to the Choice on Termination of Pregnancy Act No. 92 of 1996 (CTOP). (8) However, certain aspects of informed consent in pregnant teenagers, such as capacity, are not clearly defined, leading to potential errors and compromised autonomy in this vulnerable population. (9)

> Publications on health care providers" knowledge, attitude, and practices (KAP) regarding informed consent in South Africa and elsewhere have focused on the general adult and pediatric population and show inconsistencies regarding HCPs' KAP when obtaining informed consent. (10-15) However, there is a paucity of studies focusing on the pregnant teenage patient, who may be particularly vulnerable to their autonomy being compromised.

> This study aimed to evaluate the KAP of public sector doctors in eThekwini and Msunduzi Municipalities regarding consent for pregnant teenage patients. In generating new data, this study will provide insights that may lead to the implementation of appropriate interventions to ensure improved informed consent processes and provide the foundation for future research.

Methods Study design

We conducted a prospective, descriptive observational study using a self-administered questionnaire from 15 October to 30 November 2021.

Study setting

The study was conducted at seven government-funded hospitals in KwaZulu-Natal (KZN) providing reproductive health services to teenagers, including the cesarean section (CS). Hospitals included in the study were one level 1 hospital (Mahatma Gandhi Memorial Hospital), three level 2 hospitals (Addington Hospital, Prince Mshiyeni Memorial Hospital, and Harry Gwala Regional Hospital [formerly Edendale Hospital], and three level 3 hospitals (Victoria Mgxenge Hospital [formerly King Edward VIII Hospital], Greys Hospital, and Inkosi Albert Luthuli Hospital.

Ethics

The Biomedical **Ethics** Research Committee (BREC/00001974/2020) permission was obtained on 6 October 2021. Thereafter, gatekeeper permission was obtained from the KZN Department of Health (NHRD KZ_202108_017) and individual hospitals.

Study population and sample size

The study employed a purposive sampling method to ensure a representative sample and avoid bias. The Heads of Departments (HODs) of Anaesthesiology and Obstetrics Gynaecology (O&G) were contacted, questionnaires were distributed in person by the primary researcher, with all participants providing written informed consent. Interns who completed at least half of their anesthesia or O&G rotation, as well as community service doctors, medical officers, registrars, and specialists in these departments, were included.

After consultation with a biostatistician, a sample size of 134 was calculated (using Stata V15® statistical software) to estimate the proportions of correct responses to questions on knowledge about informed consent to within ±12% with a probability of 95%. An α of 0.05 and β of 0.8 were used for calculations. As we expected a non-response rate of up to 30%, we elected to enroll at least 190 participants.

Definitions and Questionnaire Development

We defined teenage pregnancy as a pregnant girl aged from 13 years old up to but not including 18 years old. These ages were chosen to be in line with the UNICEF definitions of teenage pregnancy; however, as patients of 18 years old and older can consent as adults in South African law, we used the upper limit of age as < 18 years old. (2, 7)

A questionnaire consisting of closed and open-ended questions was developed, guided by questionnaires from other KAP consent studies (13-15). As teenage pregnancy has not been a prior focus, questions were modified or developed accordingly. Four specialists in the fields of anesthesia and obstetrics evaluated the questionnaire's validity, and the content was then further modified. The questionnaire (see Appendix 1) had two sections: Section A, which included 7 questions, and Section B, which had 24 questions. Questions evaluated Demographics, Knowledge, Attitudes, and Practices as follows:

- Demographics (Section A Questions 1 to 6);
- Knowledge (Section B Questions 3, 5, 20, 26, 27);
- Attitudes (Section A Question 7 and Section B Questions 6, 7, 9, 10, 14, 16, 28, 29);
- Practices (Section B Questions 1,4, 8, 17, 18, 19, 23, 24, 25, 30, 31); and

 Combined Practices and Knowledge-related questions (Section B Questions 2, 8, 11, 12, 13, 15, 21, 22).

Data collection and analysis

To ensure participants' anonymity, the questionnaire contained no personal identifiers, and the informed consent form was collected separately. Quantitative answers were captured from the questionnaire into a Microsoft ExcelTM spreadsheet. For qualitative data, all free text was transcribed verbatim and entered on an ExcelTM spreadsheet. Quantitative data was analyzed using simple descriptive statistics calculated with SPSS® statistical software (Version 27, 1 BM, Chicago, IL, US) package. The primary study endpoints were reported as a number (n) and proportions (%).

The study utilized an interpretive phenomenological theoretical approach to analyze qualitative data. (16) The themes were identified by the first author and co-authors and further developed through discussion and literature comparison. The research paradigm was interpretive.

Results

A total of 250 questionnaires were distributed to participating hospitals, and 169 were returned, yielding a 67.6% response rate. Table 1 shows the participants' demographic characteristics. More anesthesia doctors were recruited compared to O&G doctors (62.7% vs. 37.3%). There was a greater proportion of interns and inexperienced doctors (< 2 years) from the anesthetic departments compared to the O&G departments.

Table 1: Demographic characteristics of participants

| Table 1: Demographic characteristics of participants | | | | | |
|--|--------------|--------------|-------------|--|--|
| Characteristic | Total | Anesthetic | Obstetric | | |
| | N= 169 (%) | N=106 (62.7) | N=63 (37,3) | | |
| Age (median; range) in years | 34 (24 – 71) | | | | |
| Gender | | | | | |
| Female | 103 (60.9) | 61 (57.5) | 42 (66.7) | | |
| Male | 65 (38.5) | 44 (41.5) | 21 (33.3) | | |
| Other | 1(0.6) | 1 (0.9) | _ | | |
| Total | N=169 | N=106 | N=63 | | |
| Level of qualification | | | | | |
| Intern | 42 (24.8) | 18 (17) | 24 (38.1) | | |
| Community service | 0 (0) | _ | _ | | |
| Medical officer | 52 (30.8) | 34 (32.1) | 18 (28.5) | | |
| Registrar | 33(19.5) | 22 (20.7) | 11 (17.5) | | |
| Specialist | 42 (24.8) | 32 (30.2) | 10 (15.9) | | |
| Total | N=169 | 106 | 63 | | |
| Years of experience | | | | | |
| 0–2 | 59(34.9) | 32(30.1) | 27 (42.9) | | |
| 3–5 | 32 (18.9) | 19 (17.9) | 13 (20.6) | | |
| 6–10 | 36 (21.3) | 29 (27.4) | 7 (11.1) | | |
| >10 | 42 (24.8) | 26 (24.5) | 16 (25.4) | | |
| Total | N=169 | N=106 | N=63 | | |
| Hospital | | | | | |
| Addington | 33 (19.5) | 16 (15.1) | 17 (27) | | |
| Harry Gwala | 15 (8.9) | 15 (14.2) | _ | | |
| Greys | 6 (3.6) | 2 (1.9) | 4 (6.3) | | |
| Inkosi Albert Luthuli | 33 (19.5) | 27 (25.5) | 6 (9.5) | | |
| Victoria Mgxenge | 23 (13.6) | 23 (21.7) | _ | | |
| Mahatma Gandhi | | 7 (6.6) | 17 (27) | | |
| Prince Mshiyeni | 30 (17.8) | 14 (13.2) | 16 (25.4) | | |
| Unknown Hospital | | 2 (1.9) | 3 (4.8) | | |
| Total | N=169 | N=106 | N=63 | | |
| Hospital-Level | | | | | |
| District | 24 (14.2) | 7 (6.6) | 17 (27.0) | | |

| Regional | 78 (46.1) | 45(42,4) | 33 (52.3) |
|------------------|-----------|-----------|-----------|
| Tertiary/Central | 62 (36.7) | 52 (49.1) | 10 (15.9) |
| Unknown | 5 (3) | 2 (1.9) | 3 (4.8) |
| Tot | al N= 160 | N-106 | N-63 |

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Knowledge Standard of information disclosure

Table 2 outlines the standard used for information disclosure before obtaining consent. Most doctors (70%) chose a

"Reasonable doctor and a reasonable patient or parent/guardian standard", compared to the correct response "Reasonable teenage pregnant patient standard", which was only chosen by 11.2 % of doctors.

Table 2: Criteria used by respondents for information disclosure

| Q B3: Information disclosure criteria | Number of respondents n (%) |
|--|-----------------------------|
| Reasonable doctor standard | 18 (10.7) |
| Reasonable teenage pregnant patient standard* | 19 (11.2) |
| Reasonable parent/guardian | 3 (1.8) |
| A reasonable doctor and a reasonable patient or parent/guardian standard | 118 (69.8) |
| No answer | 11 (6.5) |

^{*}Correct answer

Responsibility for information disclosure

When asked whose responsibility it is to ensure adequate information disclosure during consent (B5), almost 75% of doctors correctly indicated that the doctor or healthcare professional is responsible. Another 21.3% said that the doctor or healthcare professional, as well as the parent(s) or guardian, are responsible, which is incorrect.

General knowledge of applicable acts

Table 3 presents the doctors' knowledge regarding the acts associated with taking consent for various circumstances in

the teenage pregnant patient (B20) and whether correct or incorrect answers were provided for age cut-off, applicable law, and associated provisos. Just over half the doctors knew the legal age of consent for sexual intercourse (54.4%), HIV testing (55%), and medical treatment (59.1%), while a minority knew the legal age for TOP (30%) and surgery (35.5%). Across questions, a minority provided the correct applicable law (range of 7.7 to 39.1%) or provisos (range of 3 to 8.9%). Overall, the average percentage of doctors who answered correctly for each act was as follows: medical treatment (27.8%), HIV testing (25.6%), TOP (24.3%), sexual offenses (21.7%), and surgical procedures (16.8%).

Table 3: Knowledge of Acts

| | Correct answer | Respondents' answers | | |
|--------------------------|--|----------------------|--------------------|-----------------------------------|
| | | Correct N (%) | Incorrect N (%) | Don't know/ No answer N (%) |
| Sexual intercourse | | | | |
| Legal age of consent | 16 | 92 (54.4) | 63 (37.3) | 14 (8.3) |
| Applicable law/act | Sexual Offences and Related Matters/Criminal Law Amendment Act | 13 (7.7) | 24 (14.2) | 132 (78.1) |
| Applicable proviso/s | Less than two-year difference | 5 (3) | 14 (8.3) | 150 (88.7) |
| Termination of pregnancy | | | | |
| Legal age of consent | Women of any age | 51 (30.1) | 107 (63.3) | 11 (6.5) |
| Applicable law/act | Choice of Termination of Pregnancy Act | 66 (39) | 13 (7.7) | 90 (53.3) |

| Applicable proviso/s | Gestational age < 13 weeks only patient's decision | 6 (3.6) | 14 (8.3) | 149 (88.1) | | |
|----------------------|--|------------|------------|------------|--|--|
| HIV testing | | | | | | |
| Legal age of consent | 12 | 93 (55) | 55 (32.5) | 21 (12.4) | | |
| Applicable law/act | Children's act | 26 (15.4) | 13 (7.7) | 130 (76.9) | | |
| Applicable proviso/s | Sufficient maturity | 11 (6.5) | 4 (2.4) | 154 (91.1) | | |
| Medical treatment | | | | | | |
| Legal age of consent | 12 | 100 (59.2) | 55 (32.5) | 14 (8.3) | | |
| Applicable law/act | Children's act | 26 (15.4) | 13 (7.7) | 130 (76.9) | | |
| Applicable proviso/s | Sufficient maturity | 15 (8.9) | 3 (1.8) | 151 (89.3) | | |
| Surgical procedure | | | | | | |
| Legal age of consent | 12 | 60 (35.5) | 107 (63.3) | 2 (1.2) | | |
| Applicable law/act | Children's act | 19 (11.2) | 31 (18.3) | 119 (70.4) | | |
| Applicable proviso | Sufficient maturity and parental/guardian assent | 6 (3.5) | 25 (14.8) | 138 (81.7) | | |

Surgical procedure consent forms

Only 7.8% of doctors said they were aware of both Forms 34 (B26) and 35 (B27) used as templates, respectively, for the child's and surrogates' consent to a surgical procedure contained in the CA.

Attitudes

Applicability of the Choice on Termination of Pregnancy Act (CTOP) Act for CS in teenage pregnancy

Forty-four percent of doctors agreed that the CTOP Act applied to CS during a teen pregnancy. When asked to "explain" their answers, three themes emerged. The first theme was that CS is a "physiological process" that aligns with the CTOP Act's definition of "separation and removal of contents of the uterus." Secondly, doctors identified "capacity" and expressed the view that patients who undergo CS are of appropriate age and/or possess the necessary capacity to make informed decisions. A third theme was related to "autonomy," and doctors argued that patients have the right to exercise autonomy over their bodies and that "decisions regarding pregnant women and children should be made by the woman herself."

In contrast, almost a third (27.8%) of doctors felt the CTOP Act did not apply to CS. The two main themes that emerged were that TOP and CS are different procedures "physiologically" and "legally." Firstly, doctors felt TOP was reserved for non-viable pregnancies: "I believe that the TOP should not be allowed in the patient for more than 12

to 14 weeks at all." Secondly, doctors believed the CA was more suitable for obtaining consent for CS because it is a surgical procedure. Therefore, these doctors emphasized the importance of the patient's age and the requirement for parental or guardian assent as: "CS is a surgical procedure and should require consent from a parent or guardian." The remaining third (28.2%) of doctors were unsure about the applicability of the CTOP Act for CS in teenage pregnant patients, due to a lack of knowledge on the topic.

Information disclosure for consent

Only 13.6% of doctors felt that they provided their teenage pregnant patients with adequate information to procure valid consent (B6) and that the amount of information that they shared with patients was affected by educational level (76%), age (72%), duration of procedure (65%), urgency of surgery (61%), time constraints (60%), and social class (32%) (B7).

Understanding of information disclosure

Approximately 47% of doctors felt that their patients had a general understanding of the information provided during consent, while 23% disagreed and 30.4% were unsure (B9). Almost all doctors (97%) thought their teenage pregnant patients should be consented to in a language they understood (B10).

Competence/capacity to give consent

Almost 65% of doctors believed that teenage pregnant patients could consent to treatment, whereas 9.5% answered 'no', and 22% were unsure as they felt it depended on the age of the patient, presence or absence of maturity, education, comprehension, and emotional intelligence

The study found that 60% of doctors believed that labor pain affects teenage pregnant patients' capacity (B16). When asked to explain why, participants mentioned "diminished attentiveness", "irrationality", and "uncooperativeness". Moreover, some said it's not restricted to teenage patients, but all pregnant patients. A small minority (5%) of doctors believed that labor pain does not affect teenage pregnant patients' competence or capacity, arguing that if so, no individual experiencing any form of pain would be able to

provide consent. The remaining 35% of doctors were not sure about the matter.

Training

The study found that 93% of doctors felt adequately trained to obtain informed consent from adult pregnant patients, while only 31% felt prepared for teenage pregnant patients (B28 & B29). About 52% had no formal training (B30), and 94% believed all doctors should undergo formal training (B31).

Practices Exposure

Most (54%) doctors reported seeing < 10 teenage pregnant patients per month, particularly those in the anesthetic departments (B1). See details in Table 3.

Table 3: Average number of teenage pregnant patients seen per month

| rable of Average number of teenage pregnant patients seen per month | | | | |
|---|-----------|------------|-----------|--|
| The average number of te pregnant patients seen mo (by recall) | 1 1 | Anesthetic | Obstetric | |
| < 5 patients | 42 (24.9) | 37 (21.9) | 5 (3) | |
| 5 to 10 patients | 49 (29) | 28 (16.5) | 21 (12.4) | |
| 11 to 20 patients | 27 (16) | 11 (6.5) | 16 (9.5) | |
| > 20 patients | 33 (19.5) | 15 (8.9) | 18 (10.6) | |
| Blank/No answer | 18 (10.7) | 15 (8.9) | 3 (1.8) | |
| Total | 169 | 106 | 63 | |

Informed consent process

Most doctors spend 5-10 minutes giving information to patients (B4). They reported that, at their current place of work, consent for medical treatment/procedures for teenage pregnant patients is given by the patient only (49%), parent/guardian only (18%), or both patient and parent/guardian (31%) (B17).

Doctors were asked which procedures they had obtained consent for in teen pregnant patients and reported: any surgical procedures (78%), medical treatment (75%), HIV testing (54%), and TOP (43%) (B19).

Approximately 87% of doctors allowed patients to choose a procedure or treatment if alternatives were available, with 13% feeling justified in making the decision themselves. They held views such as "we often offer what's best for the patient" and "I only offer the safest." (B8)

Challenges encountered during consent

About 65% of the doctors stated that they had challenges obtaining consent from teenage pregnant patients (B18). This encompassed language barriers, obstacles in procuring consent surrogates, uncooperative patients in labor, and

differing perspectives from nurses on the acquisition of consent. In such instances, participants sought guidance from consultants (40%), other senior doctors (16.4%), medical managers (15.5%), or medical officers/registrars (9%).

Hospital protocols and consent forms

Almost half (48.2%) of doctors were unsure about whether their hospital had written guidelines for obtaining consent from teenage pregnant patients, with 41.5 % responding "no" and only 10.2% responding "yes" (B23).

About 10.5% said they had a hospital consent form for medical treatment or surgical procedures, but 33% of them found it inadequate due to a lack of risk factors and the inclusion of an anesthesia consent section (B24 &25).

Almost two-thirds (63%) of doctors indicated that they did not possess a hospital consent form specifically designed for medical treatment or surgical procedures for teenage pregnant patients, while a quarter expressed uncertainty about their stance.

Page | 6 (B14).

Original Article

Combination of practices and knowledgerelated questions

Information disclosure

Doctors were questioned about the type of information they disclose when obtaining informed consent (B2; Table 4).

Table 4: Information disclosed when obtaining informed consent.

| Type of information disclosed | Number of F | Number of Respondents N (%) | | |
|-------------------------------|-------------|-----------------------------|-----------|--|
| | Yes | No | No answer | |
| Diagnosis/medical condition | 155 (91.7) | 6 (3.6) | 8(4.7) | |
| Risks | 162 (95.8) | 6 (3.6) | 1(0.6) | |
| Benefits | 161 (95.3) | 5(2.9) | 3(1.8) | |
| Treatment options | 152 (89.9) | 14 (8.3) | 3(1.8) | |
| Recommended treatment | 153 (90.5) | 13 (7.7) | 3(1.8) | |
| Right of refusal | 127 (75.1) | 41 (24.2) | 1(0.6) | |
| Risks of refusing treatment | 139 (82.2) | 28 (16.6) | 2(1.2) | |
| Costs of medical treatment | 142 (84) | 23 (13.6) | 4(2.4) | |

In addition, 12 respondents (7.1%) shared information regarding opportunistic health education, contraceptive use, and other accessible services e.g. social workers.

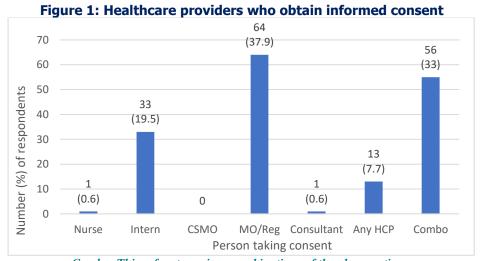
Language and consent documentation

Many doctors (75%) obtained consent from patients in both English and the patient's local language (B11). Both verbal

and written consent are taken by 58% of doctors, verbal consent only (17%) and written consent only (22%) (B12).

Person(s) responsible for obtaining consent

When asked who takes consent in hospitals (B13), most doctors said the consent is taken by MO/registrars (37.9%), while 19.5% of consents are exclusively taken by interns as demonstrated in Figure 1.



Combo: This refers to various combinations of the above options.

Competence/capacity assessment

Fifty-two percent of all doctors assess capacity based on a combination of age, educational level, and the quality of the conversation with the patient (B15).

Consent for CS

Almost 50% of doctors obtained consent for an elective CS from the patient together with parent/guardian assent

because "it was stipulated by legal or regulatory provisions" (B21& B22). However, the situation was different in the case of an emergency CS, where 42.6% of doctors obtained consent only from the patient. This was mainly attributed to the time constraints that prevented contacting the patient's surrogates.

DISCUSSION

Teenage pregnancy is a global issue, particularly in LMICs such as South Africa, causing health and social impacts. The CA, The CTOP Act, the National Health Act (NHA), and the HPCSA guidelines for informed consent are some of the medico-legal avenues available to ensure that the teenage pregnant population is protected within the medical setting. The study found that only 50% of doctors had adequate knowledge about the consent age in clinical settings for pregnant teenage patients, and less than 1 in 10 had adequate knowledge of other provisors. Paternalistic attitudes were observed, and few hospitals followed consent requirements. Most doctors identified a need for further training in obtaining informed consent in the teenage pregnant population.

Our study revealed a concerning lack of knowledge among doctors about the CA and CTOP Act, suggesting that the current practices of obtaining informed consent from their teenage pregnant patients may not be valid. Consent relating to surgical procedures and the necessary documentation, as outlined in the CA, was the most poorly answered of all the Acts. This finding was unexpected considering that doctors from both departments are likely to have consented to children for non-obstetric operations, where the CA is also applicable.

Respondents knew the least about the age of consent for CTOP which could be due to a lack of exposure (few respondents self-reported having to obtain such consent in our study); only a few of the hospitals offer TOP services; and anesthetists, who make up the majority of the sample, are usually not required for TOP procedures.

As per the NHA requirements for valid informed consent, most of our respondents knew that it is their responsibility to give patients information, and they were compliant in terms of information disclosure in the appropriate language. However, a third of our respondents based the amount of information they imparted on the patient's social class, hinting at a paternalistic attitude towards lower socioeconomic groups.

Eighteen percent of doctors obtained consent from patients' surrogates, regardless of their capacity, even though research shows that children have greater decision-making capacity, necessitating a lowering of consent age. (17)

This thread of paternalism was again identified in over 10% of doctors who indicated that they deny patients the freedom to choose a viable treatment modality that is contrary to the doctor's preference, thereby affecting their autonomy. Similarly, Chima found that 50% of doctors in his study also do not grant patients this autonomy. (14) Furthermore, a study in six Croatian hospitals found that 83% of specialists believed patients would consent to their recommended method. (15)

Informed consent for procedures should be obtained by the doctor performing the procedure, as he/she should have the most appropriate knowledge, training, and qualifications. If this is not possible, consent should be delegated to someone competent, while the primary doctor still remains responsible. Interns, (unless under senior supervision), should not be assigned this responsibility, as it violates HPCSA guidelines.

A minority of respondents inadequately deemed that the information they provided was satisfactory for legally valid consent, possibly due to their lack of understanding of the informed consent process in the teenage population.

Our study also explored the impact that labor pain has on the capacity of the teenage pregnant patient to give informed consent. Many of our participants expressed the belief that pain does affect capacity by interfering with the attentiveness and cooperativeness of the patient. Consistent with our results, Black et al. discovered in their study that 70% of the anesthetic consultants surveyed believed that labor pain hindered pregnant patients' ability to provide consent for epidural analgesia. (18) However, additional research is surfacing with contrasting results. For instance, a study conducted among anesthetic consultants in the United States revealed that 68% of participants hold the belief that women in active labor possess the capacity to provide consent for neuraxial analgesia. (19) This controversy seems to apply to all pregnant patients, irrespective of age, and therefore, if possible, consent should be taken before the onset of labor.

CONCLUSION

The study reveals that doctors have deficiencies in knowledge and clinical practices regarding informed consent in teenage pregnant patients. This is possibly due to inadequate exposure to and formal training in managing this demographic population. Paternalistic attitudes towards teenage pregnant patients are in direct violation of patients' autonomy. More focus must be given to this vulnerable population to ensure that their rights are protected.

LIMITATIONS

The study's limitations include potential data contamination due to minimal monitoring of respondents during questionnaire completion, leading to potential discussions amongst them or internet searches. Also, despite multiple attempts, we were unable to recruit an equal proportion of anesthesia and O&G respondents, potentially introducing bias. Lastly, the lengthy questionnaire may have hindered in-depth responses to the open-ended questions due to fatigue, potentially causing reporter bias.

RECOMMENDATION

Medico-legal education for doctors should be introduced at undergraduate and departmental levels, and guidelines should be developed to ensure informed consent in the teenage pregnant population. Furthermore, all hospitals should have standard operating procedures specifically regarding informed consent in teenage pregnant patients and these should be easily accessible with ongoing training and audits regarding consent processes.

On a national level, Acts governing the teenage pregnant population need to be reviewed and perhaps modified to avoid ambiguity and misinterpretation.

List of abbreviations

CA - Children's Act No. 38 of 2005

CS - Caesarean section

CTOP – Choice on Termination of Pregnancy Act No. 92 of 1996

HCP - Health care provider

HIV - Human Immunodeficiency Virus

HODs - Heads of Departments

HPCSA - Health Professions Council of South Africa

KAP - knowledge, attitude, and practices

KZN - KwaZulu-Natal

LMIC - Low- and middle-income countries

NHA - National Health Act

O&G - Obstetrics and Gynaecology

TOP - Termination of Pregnancy

UNICEF - United Nations International Children's Emergency Fund

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