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on the second opinion strategy before a C-section

Perspectiva de médicos brasileiros sobre a estratégia da segunda opinião antes de realizar uma cesárea

ABSTRACT

OBJECTIVE: To describe the opinion of doctors who participated in the Latin American Study on Cesarean section in Brazil regarding the second opinion strategy when faced with the decision of performing a C-section.

METHODS: Seventy-two doctors from the hospitals where the study took place (where the second opinion was routinely sought) and 70 from the control group answered a pre-tested self-administered structured questionnaire. Descriptive tables were prepared based on the frequency of relevant variables on opinion of physicians regarding: effectiveness of the application of the second opinion strategy; on whether they would recommend implementation of this strategy and reasons for not recommending it in private institutions; feasibility of the strategy implementation and reasons for not considering this implementation feasible in private institutions.

RESULTS: Half of the doctors from the intervention hospitals (50%) and about two thirds of those in the control group (65%) evaluated the second opinion as being or having the potential of being effective/very effective in their institutions. The great majority of those interviewed from both intervention and control hospitals considered this strategy feasible in public (87% and 95% respectively) but not in private hospitals (64% and 70% respectively), mainly because in the latter the doctors would not accept interference from a colleague in their decision-making process.

CONCLUSION: Although the second opinion strategy was perceived as effective in reducing C-section rates, doctors did not regard it feasible outside the public health system in Brazil.

KEYWORDS: Delivery, obstetrics. Referral and consultation, utilization. Health knowledge, attitudes, practice. Hospital, privative. Hospital, public. C-section.

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RESUMO

OBJETIVO: Descrever a opinião dos médicos que participaram no Brasil do Estudo Latino-Americano de Cesárea sobre a estratégia da segunda opinião antes de decidir fazer uma cesárea.

MÉTODOS: Setenta e dois médicos dos hospitais do grupo de intervenção, onde se implantou a estratégia da segunda opinião, e 70 do grupo controle auto-responderam um questionário estruturado e pré-testado. Prepararam-se tabelas descritivas para apresentar a freqüência das variáveis mais relevantes sobre a opinião dos médicos a

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respeito: da efetividade da implementação da estratégia da segunda opinião; se recomendariam ou não a sua implementação e as razões para não a recomendarem em instituições privadas; a factibilidade da sua implementação e as razões para não a considerarem factível em instituições privadas.

RESULTADOS: Metade dos médicos dos hospitais de intervenção (50%) e cerca de dois terços do grupo controle (65%) consideraram que a estratégia da segunda opinião havia sido ou poderia ser eficaz para reduzir o número de cesáreas na instituição em que eles trabalhavam. A grande maioria dos médicos que responderam o questionário nos hospitais de intervenção e controle considerou que a estratégia seria factível em instituições públicas (87% e 95% respectivamente), mas não nas privadas (64% e 70% respectivamente), principalmente porque nessas últimas os médicos não aceitariam a interferência de um colega sobre a sua decisão de fazer uma cesárea.

CONCLUSÃO: Embora a estratégia da segunda opinião tenha sido percebida como capaz de reduzir as taxas de cesariana, os médicos não a consideraram factível fora do sistema público de saúde no Brasil.

DESCRITORES: Parto obstétrico. Referência e consulta, utilização. Conhecimentos, atitudes e prática em saúde. Hospitais privados. Hospitais públicos. Cesariana.

INTRODUCTION

The incidence of cesarean section deliveries in Latin America is among one of the highest in the world and tends to be increasing. It is estimated that, in most of Latin American countries, cesarean rate is above the desirable maximum of 15% recommended by the World Health Organization (WHO). The rate is higher in private than in public hospitals and it is directly associated to the per capita gross national product of the countries.² In Chile, for example, where there are now the highest rates in the world, cesarean section is twice as frequent among women who have private health insurance than among those who use the public health system.⁹

In Brazil, routine data from the Information System on Live Births (SINASC)* showed that, in 2002, 39,7% of all deliveries were by C-section. Cesarean rates were higher in the most developed region of the country, among those with higher education and those who gave birth in private hospitals. 6.14 The high rate of C-section is clearly not related to the resolution of high-risk pregnancies, as it is higher among those with lower risk. 11

One of the strategies proposed to reduce the C-section rate is to seek a second opinion when faced with the decision of performing a cesarean delivery. This strategy requires that the doctor who is caring for a woman in labor consult with a colleague, at the same or at a higher hierarchical level (consultant). The strategy includes the provision of evidence-based guidelines and decision-making flowcharts, which should be consulted to facilitate the decision-making process. ^{10,17-19}

The adoption of the second opinion strategy in five Latin-American countries was evaluated during the Latin American Cesarean Section Study (ELAC), intending to verify its effectiveness in reducing the number of unnecessary cesareans. The study also investigated the opinion of doctors and women assisted at the participating hospitals, regarding the route of delivery in general and this strategy in particular. 5.12

The objective of the present study was to present results concerning the acceptability of the second opinion according to the Brazilian doctors participating in the Latin American Cesarean Section Study (ELAC).

METHODS

Forty public hospitals of five countries participated in the ELAC: Argentina, Brazil, Cuba, Guatemala and Mexico. In Brazil, eight hospitals were initially included, four in the Southeastern region, in the state of São Paulo, and four in the city of Recife, state of Pernambuco, Northeastern Brazil.

Hospitals were matched in four pairs according to the average number of deliveries, location and cesarean rate, following randomization procedures. They were

^{*}Sistema de Informações sobre Nascidos Vivos (SINASC). Nascidos vivos – Brasil, 2002. Available from: http://tabnet.datasus.gov.br/cgi/tabcgi.exe?idb2004/f08.def [6 Fev 2006].

then allocated by chance to one of two groups: one where the second opinion strategy (intervention) was applied for six months, and the second where the usual management was maintained (control). Before randomization all hospitals received information on the appropriate management for each obstetrical indication of cesarean section, according to current evidence-based knowledge. Intervention hospitals received flow-chart guidelines to be used by the doctors caring for pregnant women and by the consultant, when a second opinion was requested. There were flowcharts for each of the main cesarean indications which were based on the best evidence available at that time.

The intervention period was from December 1st, 1999 to May 31st, 2000. One intervention hospital in Recife and its respective control were excluded from the analysis of the clinical module, because the first was closed during part of the study period for technical reasons. As for the social module, only the intervention hospital was excluded and its control was maintained, as no paired analysis was foreseen.

The social module of ELAC had the purpose of evaluating the opinions of the women and doctors participating in the clinical module regarding C-section practice and the second opinion strategy. 5,12 Among the doctors of intervention hospitals, acceptability of application of the second opinion strategy was also investigated. In intervention hospitals, the doctors who were involved with the second opinion strategy, such as assisting doctors and/or consultants, were invited to participate. In control hospitals, only the doctors of the obstetric team at the beginning of the study were invited to participate. Based on these criteria, 215 doctors were invited to take part in the study in Brazil, 87 from intervention hospitals and 128 from control hospitals.

Following the end of the intervention (June, 2000), each one of these providers was asked to fill out an anonymous self-administered structured questionnaire. This instrument was designed in two pre-tested versions, one for the doctors of intervention hospitals and the other for those from control hospitals. The questionnaire had questions about sociodemographic profile; and rates, causes and indications of cesarean delivery. Their opinion on the second opinion strategy was assessed through the following questions: how did they evaluate the implementation of this strategy in their work settings?; would they recommend its implementation in public and private services?; did they consider it feasible the implementation of the second opinion in public and private hospitals?

The questionnaire was accompanied by an explana-

tory letter and an informed consent form. The letter set a one-week deadline for filling out the question-naires, which were returned, along with the signed consent form, in an envelope or dropped at a box available at the hospitals. Upon data collection completion, 72 doctors from intervention and 70 from control hospitals had answered the questionnaire, an answering rate of 82.7 and 54.7%, respectively.

The completed questionnaires were reviewed to verify their consistency. A specific guide was prepared for codification of the answers to open questions. The database was prepared using SPSS. The data were double-entered, by two different people, and reviewed to avoid errors. Descriptive tables with frequencies of the variables of interest were prepared.

The research protocol was approved by the Institutional Review Board of the Faculdade de Ciências Médicas of Universidade Estadual de Campinas (Unicamp).

RESULTS

Half of the responding doctors who worked in intervention hospitals and 63% of those who practiced in control hospitals were 40 years old or younger at the time of the interview; 54% in intervention and 51% in control hospitals were female. Most of the doctors in both groups worked in the public as well as in the private sector (60% in intervention and 87% in control hospitals), but the proportion of doctors who reported working only in public institutions was significantly higher in intervention than in control hospitals: 40% vs 13%.

Half of the respondents in intervention hospitals and almost two-thirds in control hospitals evaluated the second opinion strategy to be effective or very effective in their institutions. Among the doctors from intervention hospitals who considered the second opinion strategy of little or no effectiveness the reason more frequently mentioned was that, in general, there is no doubt about cesarean indication (31%) or that all Csections were necessary (28%). The corresponding proportions of doctors from control hospitals who gave the same reasons were 17% and 4%, respectively, while almost half of them (48%) claimed that, in their hospitals, the decisions about C-sections were already made in consultation with other colleagues before the intervention. This last reasoning was referred by only 6% of doctors from intervention hospitals (Table 1).

The use of a well-defined protocol applicable to most obstetric conditions was the most effective component of the intervention for more than half (54%) of

Table 1 - Opinion of doctors from intervention and control hospitals regarding the effectiveness of the application of the second opinion strategy. Brazil, 2000.

Variable	Intervention %	Control %
The second opinion strategy was/would be		
Very effective	4	14
Effective	46	51
Not very effective	46	33
Not effective at all	3	1
Total (N)	69*	69**
Reasons for which it was little/not effective at all		
In general, there is no doubt about cesarean indication/well-defined criteria	31	17
All cesareans performed at the hospital are necessary	28	4
In general, decision is already made in consultation with other doctors	6	48
Intervention does not reduce the basic cause for cesarean increase	6	9
Personal criteria prevails	6	_
Other '	28	43
Total (N)	32***	23**

^{*}No information provided by three doctors

presented in the tables).

the doctors from intervention hospitals and who considered that the strategy was effective. The participation of a consultant was the other reason frequently given (29%). Among doctors from control hospitals who thought the second opinion strategy would be effective or very effective in their hospitals, the most frequent reason given, by 43% of them, was that it "makes it possible to exchange experiences/allows"

for a more detailed discussion of the case" (data not

The great majority (89%) of the doctors from intervention hospitals said they would recommend implementation of the second opinion strategy in public institutions in general. Only seven providers reported they would not make this recommendation. They claimed there was a lack of human resources, as well as inadequate monetary compensation, and that the strategy would not be effective. On the other hand, among the doctors who would recommend the strat-

egy implementation, the main reasons mentioned

were that the second opinion is an efficient method to decrease unnecessary C-section rates (34%), and that if the implementation results were positive there would be no reason for not recommending it/it should be applied (22%), and/or reduce the risks/reduce mother/infant morbimortality (20%) (data not presented in the tables).

In regard to the potential implementation of the second opinion strategy in the private sector, 61% of the doctors from intervention hospitals said they would recommend it. Among the 39% that would not make this recommendation, the main reasons mentioned were that, in these institutions, "there are other interests and indications" (17%) and/or the responsibility for the patient lies on the doctor and not on the institution or the team (13%) (Table 2).

Concerning the feasibility of implementing the second opinion strategy in public institutions, 87% of the doctors from intervention and 95% from control

Table 2 - Opinion of the intervention hospital doctors on whether they would recommend the implementation of the second opinion strategy in private institutions, and the reasons for not recommending it. Brazil, 2000.

Variable	Doctors %
Would you recommend it?	
Yes	61
No	39
Total (N)	70*
Reasons for not recommending it in private institutions	
There are other interests at stake and indications	17
The doctor is responsible and not the institution; or the team/ responsibility lies with the one who cares for the	
patient and not with the consultant	13
The patients choose a doctor/the decision is taken together	9
There is no teamwork/it is not easy to listen to the opinion of a peer	9
It is difficult to have a consistent management	9
It questions professional responsibility/it could generate mistrust concerning competence of the doctor in charge	e 4
Patients prefer cesareans	4
It would imply many ethical problems	4
Others	30
Total (N)	23**

^{*}No information provided by two doctors

^{**}No information provided by one doctor ***No information provided by two doctors

^{**}No information provided by four doctors

Table 3 - Opinion of intervention and control hospitals doctors regarding the feasibility of implementing a second opinion strategy in private institutions, and the reasons for not considering it feasible (in percentages). Brazil, 2000.

Variable	Intervention %	Control %
Would the implementation be feasible in private institutions?		
Yes	36	30
No	64	70
Total (N)	69*	50**
Reasons why it would not be feasible in private institutions		
Providers do not accept others questioning their decisions	26	31
There are obstacles (such as family pressure, potential legal claims, etc.)	13	6
There are not sufficient human resources	15	3
There are other interests at stake not necessarily related to the best form to end a pregnancy21		13
The attending doctor has exclusive responsibility for the patient	, j j j 21	22
Others	18	28
Total (N)	39***	32****

^{*}No information provided by three doctors

hospitals considered it to be feasible. Among those doctors from intervention hospitals who did not consider it feasible (13%), the main reason, mentioned by 29% of them, was that, in most public hospitals, there are not two obstetricians-gynecologists on duty at the same time; the next most frequent reason (14%) was that there is not enough personnel and there was a lack of hierarchical structure. Only three doctors from control hospitals believed that the strategy implementation would not be doable: one said the salaries paid to doctors were very low, and correcting this problem would result in a great burden to the State; a second one said there could be misinterpretation of opinions; and a third one claimed that not all public institutions always have two obstetricians on duty (data not presented in the tables).

On the other hand, 36% of doctors from intervention hospitals and 30% from control hospitals considered it would be feasible to implement the second opinion strategy in private institutions. The main reasons mentioned by the respondents who believed this implementation would not be feasible (64% from intervention and 70% from control hospitals), were that "the providers do not accept their decisions to be questioned" (around 30%); "the attending doctor has exclusive responsibility for the patient" (just over 20%); and "there are other interests at stake not necessarily related with the best form to end a pregnancy" (between 13 and 20%). The proportion of doctors from the two groups who gave these reasons was quite similar (Table 3).

DISCUSSION

The present study findings indicate that the opinion of the doctors who answered the questionnaire was almost evenly divided between those who believe the implementation of the second opinion strategy did not (in intervention hospitals) or would not (in control hospitals) have a great impact on cesarean rates in their institutions, and those who believe the strategy is or would be effective. In spite of that, most respondents regarded the intervention as positive and would recommend its implementation in the country, both in public and in private services.

The doctors from control hospitals had, in general, a more optimistic view of the strategy effectiveness and feasibility than those who had the experience of its application. The possible interpretation for this difference may be that the problems observed during the strategy implementation made those from intervention hospitals less optimistic about it while those from control hospitals still keep a more idealized view of its application.

One of the clearest results from the study is the abysmal differences in the expectation of feasibility of the strategy in public versus private hospitals. While 90% would recommend the strategy in public hospitals, less than 30% would do the same in private hospitals. The main argument to sustain this position was based on the distinct nature of institution-doctor-patient relationships in private hospitals. Health care in these institutions is individualized and each doctor is responsible for his/her patients, and, consequently, the interference of another professional is not acceptable. In addition, considering that 40% of the doctors who practiced in intervention hospitals had no experience in the private sector, their opinion may be biased by their lack of familiarity with private settings.

The reasons given for not recommending it or believing that the second opinion strategy would not be feasible in private hospitals revealed doctors' unawareness of the ethical implications of carrying out a cesarean section for non-medical rea-

^{**}No information provided by five doctors and 15 did not know

**No information provided by five doctors

**No information provided by three doctors

sons.^{7,16} The argument that doctors in private practice would not accept any interference in their doctor-patient relationship means an uncontested acceptance that they cannot be subject to any social control. The main reason given for not recommending and also for believing the strategy would not be feasible in private practice was that "there are other interests at stake not necessarily related to the best form to end a pregnancy". This suggests also the acceptance that doctors are allowed to act without considering what is best for the health and safety of their patients.

It is well known that in Brazil women with higher risk of ending up having a cesarean delivery are those who have better socioeconomic conditions and can receive care from private institutions, either as private or private insured patients.^{3,8,14,15} It is often argued that private services respect women's autonomy allowing them to choose to have a cesarean section, while women in public services are not given the possibility of choice. Nevertheless, other studies^{6,14} involving women in the private sector show that they also would rather have a vaginal delivery but their choice for a C-section is often induced by their doctors.

Providers work under the pressure of high productivity, both individually and collectively. In this context, it is not difficult to understand how inconvenient is to follow labor for long hours, when the condition can be solved in just one hour by surgical delivery. In a previous analysis of other data from the same study,* it was found that 87% of the respondents cited convenience in schedule planning and 33% economic advantages when performing C-sections as relevant reasons that could explain increasing cesarean rates in Brazil in the last decade.

This same practice, in fact, is followed in public services as well, since doctors frequently work in both public and private sector and need good time management to be able to meet all their duties. In this context, it is possible to understand the perception of those interviewed regarding the unfeasibility of the second opinion strategy in private institutions. At the same time, it is expected that this strategy will be regarded as more viable in the public sector due to the availability of a professional team on duty, in-

cluding resident doctors who can take turns in following women during labor.

The study results presented here refer exclusively to Brazilian doctors in the institutions involved in the mentioned multinational and multicentric trial (ELAC). They apply, therefore, to the reality of the providers involved in the health care routine of public hospitals that develop teaching activities and are concerned with the high cesarean rates, which led them to agree to participate in the study. It would also be interesting to know if these results are confirmed or are different in a wider sample of Brazilian providers. Such information would help to verify if the results of this study are applicable nationwide. However, these results are similar to those observed among doctors who participated in the ELAC in the other Latin American countries already mentioned.¹

According to the opinion given by the doctors interviewed in the present study the remarkable high rate of C-section among private patients in Brazil would be irreversible. This may not be true, but it will require accepting that the adoption of any strategy aiming at reducing cesarean rates cannot be restricted to technical-scientific issues. These, by the way, have already been nearly exhaustively discussed, emphasizing the scientific evidence that is not in favor of surgical delivery without a precise recommendation for it.^{4,13,16}

One of the contributions of this study is showing that an effective approach to the reduction of C-section rates seems to require all related actors to be taken into account, in their socioeconomic and political contexts, while seeking structural alternatives to solve the problem. This would imply discussing themes such as education of the general population, especially women, to empower them to exercise their reproductive and civil rights in the health care process during labor. But it will also require redefining the focus of medical education and the organization of delivery care services.

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REFERENCES

- Althabe F, Belizan JM, Villar J, Alexander S, Bergel E, Ramos S, et al. Mandatory second opinion to reduce rates of unnecessary caesarean sections in Latin America: a cluster randomised controlled trial. *Lancet*. 2004;363(9425):1934-40.
- Belizan J, Althabe F, Barros FC, Alexander S. Rates and implications of caesarean sections in Latin America: ecological study. *BMJ*. 1999;319(7222):1397-402.
- Chacham AS, Perpétuo IHO. The incidence of caesarean deliveries in Belo Horizonte, Brazil: Social and economic determinants. Reprod Health Matters. 1998;6(11):115-21.
- 4. Faúndes A, Perpétuo IHO. Cesárea por conveniência e a ética médica. Ser Médico. 2002;5(19):32-4.
- Faúndes A, Pádua KS, Osis MJD, Cecatti JG, Sousa MH. Opinião de mulheres e médicos brasileiros sobre a preferência pela via de parto. Rev Saúde Pública. 2004;38(4):488-94.
- Hopkins K. Are brazilian women really choosing to deliver by cesarean? Soc Sci Med. 2000;51(5):725-40.
- Mello e Souza C. C-sections as ideal births: the cultural constructions of beneficence and patients' rights in Brazil. Camb Q Healthc Ethics. 1994;3(3):358-66.
- 8. Moraes MS, Goldenberg P. Cesáreas: um perfil epidêmico. *Cad Saúde Pública*. 2001;17(3):509-19.
- Murray S. Relation between private health insurance and high rates of caesarean section in Chile: qualitative and quantitative study. *BMJ*. 2000;321(7275):1501-5.

- Myers SA, Gleicher N. A successful program to lower cesarean-section rates. N Engl J Med. 1988;319(23):1511-6.
- 11. Organización Panamericana de la Salud OPAS. La salud en las Americas. Washington (DC); 1998. v. 1.
- 12. Osis MJD, Pádua KS, Duarte GA, Souza TR, Faúndes A. The opinion of brazilian women regarding vaginal labor and cesarean section. *Int J Gynaecol Obstet*. 2001;75 Suppl 1:S59-66.
- Penna L, Arulkumaran S. Cesarean section for non-medical reasons. *Int J Gynaecol Obstet*. 2003:82(3):399-409.
- Potter JE, Berquó E, Perpétuo IHO, Leal OF, Hopkins K, Souza MR, et al. Unwanted caesarean sections among public and private patients in Brazil: prospective study. BMJ. 2001;323(7322):1155-8.
- Rattner D. Sobre a hipótese de estabilização das taxas de cesárea do estado de São Paulo, Brasil. Rev Saúde Pública. 1996;30(1):19-33.
- Schenker JG, Cain JM. FIGO committee report: FIGO committee for the ethical aspects of human reproduction and women's health. *Int J Gynaecol Obstet*. 1999;64(3):317-22.
- Sloan NL, Pinto E, Calle A, Langer A, Winikoff B, Fassihian G. Reduction of cesarean delivery rate in Ecuador. *Int J Gynaecol Obstet*. 2000;69(3):229-36.
- 18. Walker R, Turnbull D, Wilkinson C. Strategies to address global cesarean section rates: a review of the evidence. *Birth.* 2002;29(1):28-39.
- Wolfe S. Unnecessary cesarean sections: curing a national epidemic. *Public Citiz Health Res Group*. 1994;10:1-7.

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