



Journal of Medical Sciences

ISSN 1682-4474

science
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Short Communication

JMS (ISSN 1682-4474) is an International, peer-reviewed scientific journal that publishes original article in experimental & clinical medicine and related disciplines such as molecular biology, biochemistry, genetics, biophysics, bio-and medical technology. JMS is issued six times per year on paper and in electronic format.

For further information about this article or if you need reprints, please contact:

Azar Baradaran
Department of Biochemistry,
Center of Research and
Reference Laboratory of Iran,
Hospital Bu Ali, Damavand st.
P.O. Box 17115-365,
Tehran, 17117, Iran

Tel: (00) 98 21 2406930
Fax: (00) 98 21 3796373

J. Med. Sci., 6 (4): 690-692
July-August, 2006

Effect of a Participatory Intervention to Reduce the Number of Unnecessary Cesarean Sections Performed in Shahrekord of Iran

¹Forouzan Ganji, ¹Hossein Yusefi and ²Azar Baradaran

In this research the role of participatory people in decreasing cesarean frequency has been investigated. For this purpose 171 pregnant women randomly selected from all pregnant women in Shahrekord. A participator team including housewives, teachers, sales, health communicators' physicians, midwives and nurses were responsible for educating the selected women about the indication of cesarean section and benefits of vaginal birth. The contexts of the educated women were evaluated by a questionnaire from before and after education. In this research about 70% of the women were satisfied with the education program. Also frequency of cesarean which were 63% before intervention and after education decreased to 51% as a result of the education. The result of this study indicated that in health subjects such a cesarean which is related to society and human culture, participatory interventions can yield satisfactory results.

Key words: Unnecessary cesarean, community participation, pregnant women

INTRODUCTION

Birth, a normal human physiological process was once a high mortality event causing both serious maternal and newborn losses (Tangcharoensathien *et al.*, 1998; OECD, 1993; Wilkinson *et al.*, 1998). Cesarean delivery has played a major role in lowering both maternal and prenatal morbidity rates during the past century. Cesarean birth is necessary whenever labor is unsafe for either mother or fetus. Delivery by cesarean usually is associated with an increased cost for the health care system and the patient, C-section also increased complications for mother and fetus, when compared with vaginal birth. (Tangcharoensathien *et al.*, 1998; OECD, 1993; Wilkinson *et al.*, 1998) C-Section accounted for 36% of all deliveries. In Iran, at the Shahrekord district hospital 49% in 2001. In Iran data from private hospitals show that 40% out of 100% women deliver their babies by cesarean where there is no group monitoring such operation, however, more and more C-section operations are done with little or no medical reason, say medical observers. This means these women are not only being forced to spend huge amounts of money unnecessarily; they are also opening themselves up to high physical risk (Moghareh Abed and Ghoharrian, 1999). These factors have led to efforts to reduce the rate of cesarean delivery. In the first half of the 20th century a variety of public health programs were operating with some measure of what would later be called community participation. Community participation has long been advocated to build links between primary services and their users and to improve service quality. However, the evidence base for the effectiveness of participatory models is scarce (Jewkes and Murcot, 1998; London: Health Development Agency, 2000). We postulated that a community based participatory intervention could reduce the cesarean rate. The study aims to show the effect of community participation on C-sections in order to provide a model of participatory approach on health problems.

MATERIALS AND METHODS

This study is field trial that was conducted on pregnant women who are supported by urban health centers 1,2,5,6 and Moalem of Shahrekord city. Based on the sampling frame, 171 pregnant women were randomly selected. A participator team from stake holders, including housewives, teachers, sales, health communicators, physicians, midwives, women from religious school, nurses, women hairdressers and a number of non government organizations was formed.

The team divided to 3 groups after holding consulting sessions. One of the groups, who were expert, trained

others. They were responsible for educating the selected pregnant women (Trainer to trainer). One of them was responsible for participation in the designing and broad casting films of community-based medical education. Their information influenced the people in Shahrekord city. The latest group who were responsible for organizing a committee in the health deputy of Shahrekord medical university also was included university vice chancellor, head of health deputy and manager of district hospital. Duties of the committee were collection classification and analysis of the statistics of deliveries, by district hospital, in order to reduce unnecessary cesarean at district hospital. Specific questionnaires designed to assess knowledge about indications and complications of C-Section, utility of vaginal delivery and satisfaction of project. The contexts of the educated women were evaluated by a questionnaire from before and after education. A prospective census was decided, will all deliveries for the 10 month. For statistical analysis descriptive data are expressed as percentage, comparison between groups before and after intervention were considered using paired t-test.

RESULTS AND DISCUSSION

In this research about 63.7% (109) of the pregnant women were satisfied with the education about normal delivery, 75.4% (122) of them were satisfied with the education about reasons and indications of cesarean and 79.5% (139) of them were satisfied with the education about the complications of cesarean. Frequency of cesarean which were 63% before intervention and after intervention decreased 51% in Shahrekord (Table 1).

The results showed that participation of people group (stakeholders) was caused to reduce cesarean rate in administrable centers of project, except Moalem center. In Mexico one project was successfully completed by June 1997. The study developed a strategy to decrease the incidence of cesarean section in the city of Guanajuato. The strategy included providing prenatal education about the procedure, establishing clear guidelines for physicians, training staff in the guide lines and establishing a system for monitoring compliance (Mexico International Development Agency, 1997).

Table 1: Frequency of cesarean in urban health centers before and after intervention

Urban health center	Frequency (%)		
	Before	After	p-value
No. 1	66	50	0.05
No. 2	51	41	0.05
No. 5	62	56	0.05
No. 6	64	62	No significant
Moalem Health Center	73	47	0.05

All over the world, implementation, development of effective and revitalization of community based activities are efforts of the health policymakers. For instance in Bangladesh, Brazil, China, India Malaysia, Uganda (Mexico International Development Agency, 1997).

Community involvement may have a positive impact on the success of health project development and implementation. Participation may also directly affect individuals by changing attitudes and actions towards the causes of ill-health, promoting a sense of responsibility and increasing personal confidence and self esteem (Jewkes and Murcot, 1998; London: Health Development Agency, 2000). In improving health coverage and bridging gap of health service to community, Governments have to use community participation. The status of women has an effect on their health and on that of the community in general. As women have special needs, sex differentials should be taken into consideration in the provision of health care. Women play a big role in the provision of health services at all levels, so every effort should be made to involve them.

CONCLUSIONS

This study contributes to the understanding that community participation could lead to solve health Multi disciplinary problems.

ACKNOWLEDGEMENT

Financial support was provided by Shahrekord University of Medical Science, research affairs.

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