Promoting Safe Motherhood in the Community: The Case for Strategies that Include Men

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ABSTRACT

Although a decade has now passed since the launching of the Safe Motherhood Initiative, maternal mortality continues to be the health indicator showing the greatest disparity between developed and developing countries. Recently revised WHO and UNICEF figures indicate that an estimated 90% of the 585,000 worldwide maternal deaths that occur each year take place in sub-Saharan Africa and Asia. In terms of the lifetime risk of maternal death, this disparity remains striking: 1 in 12 women in parts of sub-Saharan Africa, compared with 1 in 4,000 women in Northern Europe. In addition, for every woman who dies, an estimated 16–17 will suffer from pregnancy-related complications. Research suggests that, in addition to biomedical interventions and the strengthening of health care services, improving awareness of obstetric complications among members of a pregnant woman's immediate and wider social network is an important step in improving her chances of survival when such complications occur. Many of the interventions implemented so far have focused exclusively on improving women's knowledge and practices as they relate to maternal health issues. Nevertheless, it is now increasingly being recognised that the actions required to achieve improvements in reproductive health outcomes in general, and maternal health in particular, should involve communities in the process and encourage men's active participation. Despite this, very few studies on risk perceptions or interventions to raise community awareness of obstetric risk factors, their complications and their consequences have targeted men. The present article argues for the development and testing of risk awareness interventions, which, in addition to women, target men in their familial and social roles within communities and as workers within health care services as a means of improving maternal health outcomes. (*Afr J Reprod Health* 2001; 5[2]:10-21)

RÉSUMÉ

L'avancement de la maternité sans risque dans la communauté: plaidoyer en faveur des stratégies qui s'adressent aussi aux Hommes. Quoique la *Safe Motherhood Initiative* ait été lancée il y a maintenant une décennie, la mortaité maternelle reste toujours l'indice de la santé qui montre la plus grande disparité entre les pays développés et les pays en voie de développement. Dernièrement, les chiffres revus qui émanent de l'OMS et du FISE montrent qu'environ 90% des 585000 décès maternels partout dans le monde qui ont lieu chaque année, se trouvent en Afrique subsaharienne et en Asie. En ce qui conceme le risque de toute une vie du décès maternel, cette disparité reste frappante: I femme sur 12 dans certaines régions de l'Afrique subsaharienne, par rapport à I femme sur 4000 en Europe du nord. De plus, pour chaque femme qui meurt, il y en aura à peu près 16-17 qui seront atteintes des complications liées à la grossesse. La recherche laisse supposer qu'en plus des interventions biomédicales et l'amélioration des prestations de santé, l'amélioration au niveau de la sensibilisation aux complications obstétriques parmi les membres du reseau proche et plus large d'une femme enceinte est une démarche importante pour améliorer les possibilités de sa survie quand telles complications se produisent. Beaucoup d'interventions qui ont été mises à exécution jusqu'ici, ont concentré exclusivement sur l'amélioration de la connaissance et les pratiques chez les femmes en ce qui concerne les problèmes de la santé maternelle. Néanmoins, il est maintenant de plus en plus reconnu que les mesures nécessaries pour accomplir des améliorations par rapport aux issues dans la santé reproductive en général et par rapport à la santé maternelle en particulier doivent s'adresser aux communautés en même temps et doivent encourager la participation active des hommes. Malgré ceci, très peu d'études sur la perception de risque ou des interventions destinées à augmenter la conscience de la communauté des facteurs de risque obstétrique, leur complications et leurs conséquences, ont visé les hommes. Le présent article préconise le développement et l'évaluation des interventions de la sensibilisation au risque, qui en plus des femmes, visent les hommes dans leurs rôles familiaux et sociaux au sein des communautés et en tant que membres du personnel des services de santé comme moyen de l'amélioration des issues de la santé maternelle. (*Rev Afr Santé Reprod* 2001; 5[2]:10-21)

KEY WORDS: *Safe motherhood, risk factors, interventions, community, men*

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Introduction

Medical Causes of Maternal Deaths

Research on maternal health over the past twenty five years has identified the direct and indirect medical causes of maternal mortality in developing countries.[1-13] Haemorrhage, obstructed labour, induced abortion, sepsis, and hypertensive disorders are the five major direct medical causes of poor maternal health, accounting for approximately 80% of all maternal deaths.[14] Indirect medical causes account for approximately 20% of maternal mortality and these include health conditions such as anaemia, malaria, viral hepatitis and tuberculosis.[14] These latter conditions contribute indirectly to poor maternal health outcomes in that they may take their toll on a woman's health long before she becomes pregnant, or may become more acute during pregnancy, thus increasing her risk of experiencing obstetric complications.

This increased understanding of the medical causes of maternal mortality formed the basis of some of the initial efforts to improve maternal health outcomes in developing country settings; one set of approaches advocated using medical criteria to identify and target "high risk" pregnant women for specific maternal health interventions.[15-19] Other approaches recommended a "package" of health care interventions that national governments should consider introducing in order to address aspects of maternal health before, during and after pregnancy and childbirth.[14] These interventions include improving access to family planning, offering services for the prevention and cure of sexually transmitted diseases, and improving the quality of and resources for maternity care, e.g., ensuring iron and folate supplementation, malaria prevention and management, and essential obstetric supplies. Despite these international recommendations and national efforts to improve maternal health, pregnancy and childbirth continue to be life-threatening events for many women. It may be that such packages in and of themselves may not be sufficient to address the multitude of factors that contribute to poor maternal health outcomes.

Estimates and Indicators

Although a decade has now passed since the launching of the Safe Motherhood Initiative in Nairobi in 1987, maternal mortality continues to be the development indicator with the greatest disparity between developed and developing countries. According to recently revised WHO and UNICEF global estimates for maternal mortality, the number of maternal deaths occurring every year is now estimated at 585,000.[20] Of these deaths, an estimated 90% occurs in Asia and sub-Saharan Africa, 10% in other developing regions, and less than 1% in developed countries.[21] The lifetime risk of maternal death of 1 in 12 women in parts of sub-Saharan Africa contrasts sharply with 1 in 4000 women for Northern Europe.[20] Morbidities linked to childbearing are also high. For every woman who dies from pregnancy-related causes, it is estimated that 16–17 women will suffer complications that seriously affect their health, often permanently.[22-23]

Revised indicators for maternity coverage in most developing countries also raise cause for concern. It is now estimated that more than 45 million pregnant women do not receive any antenatal care, that 60 million women give birth every year without the assistance of a skilled attendant, and that 90–100 million women do not receive any postpartum care within medical establishments.[24] In addition to the health risks it holds for pregnant women, limited access to quality maternity care also has consequences for the fetus and the newborn. Maternal complications and poor management of labour and delivery can lead to perinatal death or result in developmental impairments in the surviving newborn.[25]

The "Why" of Maternal Deaths: Operational Factors

Despite their medical causes, the majority of maternal deaths in developing country settings are preventable.[26-28] Some of the initial efforts to better understand the *why* of these preventable deaths indicated that maternal mortality is more than just a medical problem. Rather, maternal mortality is the result of the interaction of a variety of factors that serve to limit or delay women's access to maternal health care services, particularly emergency obstetric care when life-threatening complications arise. This latter type of delay is often further categorised in three ways as follows: (1) delays in the initial decision to seek care; (2) delays in a woman's arrival at a hospital or clinic; and (3) delays that occur once a woman has arrived within the health

care facility.[29]

Many of the factors that contribute to delays in the initial decision to seek care and the timing of a woman's arrival at a hospital or clinic are the result of an interplay of social, cultural and economic factors that come into play at the level of the family or within the community.[29-38] Aspects of everyday life such as women's decision-making power, their perception of risks associated with pregnancy and childbirth, and the degree to which they are bound by cultural norms and "traditional" practices that harm their health have all been identified as factors that limit women's access to health care and, thus, ultimately, maternal health outcomes.[39-46] The degree of women's economic autonomy, their legal rights, their access to education, and their overall status in the society have also been identified as affecting their access to maternal health care.[47-49]

Social, cultural and economic factors that limit or delay women's access to maternal health care may also come into play within the context of the formal health care system. The quality of provider-client interactions, health care workers' ability to remain motivated at work, as well as the availability of medicines and supplies may affect women's perceptions of the benefits to be gained by utilising maternal health care services or contribute to delays once she has arrived seeking treatment.[34,50-59] These same factors also contribute to the delays that occur within a health care facility when complications arise and emergency obstetric care is needed.[60-62]

Concern with this latter category of delay has resulted in a variety of recommendations to increase women's access to quality emergency obstetric care in health facilities. Some of these include strengthening communication and referral resources, improving and/or upgrading emergency obstetric care facilities, and improving the skills of those who attend births.[21,63-64]

Although not discounting the importance of a functioning health care system, Sai and Measham suggest that improving the formal health care system in itself isn't enough because many women die even when quality services are available.[66] They suggest that if formal health care systems are to work optimally, people must be informed, motivated and empowered to use them. They further note that when women or their husbands or mothers-in-law believe these services are inappropriate or irrelevant, they may be apprehensive about using them.

A recent review of literature that examine some of the social, cultural, economic and political factors that affect maternal health outcomes indicates that asymmetrical relations of power that place women at a disadvantage within the household, the community, and within health care facilities are barriers to good maternal health care.[48] Women's empowerment is seen as crucial in that women must have the ability to articulate their needs, access services confidently and without delay, make informed choices about their health, and seek accountability from service providers and managers.[48] In addition to the long-term strategies needed such as changes in educational policies, economic opportunities, and legislation on women's legal rights within the context of marriage, the review notes that short-term strategies to improve maternal health outcomes must also take into account the realities of women's lives within the context of their families and their communities. The reality in many communities around the world is that a woman's decision-making power as it relates to her own health is often quite limited.[45,67-68] For example, studies in India, Bolivia and Indonesia indicate that delays in decisions to seek care occur because those responsible for making decisions oftentimes may not even recognise certain symptoms or complications as dangerous, nor associate them with maternal death.[43,69] As a result of these and similar findings, it is increasingly being recognised that short-term efforts to improve maternal health outcomes must also target those members of a woman's immediate social network who either make decisions for or have influence over her, such as her in-laws, her husband or other male relatives.

Despite their lack of decision-making power, however, women are often still the sole focus of health education campaigns that seek to encourage women's participation in modern maternity care services.[33,70] Although these types of health education campaigns have the potential of reaching a great number of women at the community level, these strategies do not always take into account the social context in which health care decisions are made.[71-74] For example, as already noted above, men, whether in their family roles as husbands, partners, fathers, or brothers of pregnant women

or in their social roles as leaders, elders, or healers, are often the key decision-makers within the family and the community. The delays that can occur when family members must await permission to seek health care from absent or ill-informed heads of households can be fatal.[71] This is particularly true when health emergencies that require the allocation of scarce economic resources arise. This responsibility persists even when male family members are absent, often employed in distant areas.

Other researchers have identified important factors to address at the community level such as lack of awareness about maternal health-related issues within the community, or the absence of linkages between the health services and the community.[70,75-78] At the same time, however, other studies remind us that health outcomes are also shaped by factors external to a given community, such as macroeconomic policies imposed from outside. That structural adjustment policies have widened social and economic inequities in some African contexts, imposing often insurmountable barriers to affordable, quality health care has been well documented in literature.[50,79-81] Research that attempts to identify how community level factors contribute to poor maternal health outcomes must take care to situate those factors within a broader context.

Focusing attention at the level of the family, the community, and the health services sector may also reveal categories of events and delays that occur even prior to the onset of obstetric complications. These may include a failure to book for antenatal care, or not ensuring that economic resources are available to cover the non-medical and medical costs associated with pregnancy and delivery. These costs many include the fare for transport to a health facility, meals eaten while away from home, and any medical supplies that women who give birth in resource-poor health facilities are often required to supply by themselves. Paying attention to the social, cultural and economic factors that come into play within the family, the community, and within health care facilities may also reveal that these factors are not bounded categories, but may instead work synergistically to affect maternal health outcomes in negative ways. Identifying how they interact to contribute to poor maternal health outcomes may reveal a need for interventions that are targeted at specific factors or categories of individuals within the pregnant woman's immediate and wider social networks.

Delineating the Context of Maternal Health

As literature suggests, the high levels of maternal mortality seen in many developing country settings are the result of a complex interplay of social, cultural, economic and medical factors. Public health efforts to improve maternal health, therefore, must employ innovative approaches that acknowledge this complexity and are able to take it into account when developing community-based interventions relevant to specific settings. Qualitative research is an essential part of this process. A better understanding of people's health needs and priorities as they themselves define them, their perceptions of maternal health risks, their knowledge of danger signs during pregnancy, and of the barriers that prevent or impede their use of maternal health care facilities within specific local settings is essential if public health interventions to improve maternal health outcomes are to be relevant to the everyday realities of people's lives.[82,83]

However, it is important that qualitative enquiries into maternal health practices are not limited to focus group discussions. Although focus group discussions may be a good format in which to elicit *normative* statements about cultural beliefs and practices as they relate to pregnancy and childbirth, this format may not provide adequate insight into people's actual everyday practices within specific settings or under certain constraints. Qualitative research focusing on maternal health must also incorporate methods such as observations in the community and within the formal and informal health sectors so as to shed light onto the context in which people make decisions that affect their health and that of their family members.[71,73,84,85]

Several researchers suggest that we pay more attention to how the local environment influences people's willingness to participate in health-related activities. What, for example, motivates people's enthusiasm and engagement in health-promoting activities and behaviours? What leads to their disinterest and unwillingness?[84] What context-specific factors shape health workers' attitudes towards their clients?[86] In terms of men specifically, do their concerns and actions with respect to maternal health change depending on whether they are be-

ing consulted in their role as fathers, husbands, brothers or healers of pregnant women? Do current economic hardships in the community necessitate that men seek employment elsewhere, resulting in them living far from their families? If so, how does their physical distance from their families affect the decision-making process when emergency obstetric care is needed and funds to pay for it not immediately accessible? Expanding the research focus to allow for a situating of individual behaviour within the local context of maternal health may reveal, in turn, what some have referred to as the "unofficial" risks of maternal health[71] and the hidden rationalities of health-seeking behaviour.[85,87] The interplay of factors that lead to poor maternal health outcomes within specific settings is what community-based interventions to improve maternal health outcomes should aim to address.

Men's Participation

The 1994 International Conference on Population and Development (ICPD) in Cairo reaffirmed the need for the development of programs that encourage men's participation in reproductive health issues.[88] This includes responsible parenthood, sexual and reproductive behaviour, and prevention of sexually transmitted diseases. As a result of that important conference, it is now increasingly being recognised that actions required to achieve improvements in women's reproductive health should involve men and encourage them to share the responsibility.[89] Others have suggested that health education and communication strategies to raise awareness of reproductive health issues should target subgroups of men according to their various roles within the community.[90] This includes males from the adolescent years.

Despite ICPD's call for an increased participation of men in all areas of reproduction and family formation, few studies or interventions have addressed the role of men with regard to maternal health specifically. Instead, many of the institutions working in developing country settings have focused their efforts on increasing men's participation in reproductive health as it relates to decision-making in family planning only.[91-95] As a result of this latter type of interventions, men's role as contraceptors themselves and their ability to affect their partner's contraceptive choices in negative as well as positive ways is increasingly becoming a central issue in current discussions of how gender relations influence reproductive health outcomes.[97]

Although efforts to involve men in reproductive health through family planning have resulted in their increased knowledge about contraception as well as their partner's contraceptive use in some instances, there remains little community-based data on the extent to which men are aware of the factors associated with maternal morbidity and mortality or are encouraged to share responsibility in community-based solutions to improve maternal health.

Lessons Learnt

Community Participation in Maternal Health

A review of lessons learnt in safe motherhood over the past ten years has demonstrated that, in addition to strong political will at the international and national levels, community involvement in locally-based safe motherhood interventions is essential to their success.[77,97,98] Community involvement in safe motherhood means that communities actively participate in the identification of problems and barriers to care, as well as in the planning and development of interventions. The coordination of efforts between international and locally based NGOs that can provide logistic support has also been deemed important, although large-scale financially supported projects that are not tailored to local conditions were deemed ineffective in some communities.[76,99-101]

Several projects have focused their efforts on mobilising members of a pregnant woman's family and community whose decisions can have a direct or indirect bearing on her survival should complications arise. These efforts are varied and include health education campaigns to increase awareness of the consequences of delayed treatment, the setting up of emergency loan funds, and the establishment of locally-based systems of emergency transport.[61,76,102,103] A review of lessons learned from community-based safe motherhood efforts in Asia suggests that community health workers, and members of locally-based women, youth and religious organisations can be effective members of health promotion and outreach teams.[77] This same review also notes that ensuring the availability of family planning methods and that both men and

women understand the health benefits of birth spacing, were other effective ways of promoting safe motherhood concepts in Cambodian communities. Experience of emergency loan funds in Indonesia and India indicates that community members were very involved in the development and implementation stages of these projects, an involvement the authors attribute to the funds' success.[105,106]

The results of multidisciplinary research in three West African countries indicate that, in some communities, interventions to encourage safe motherhood practices have been successful, while in others they have not.[63] The importance of ensuring that health care facilities in the study area are equipped with the basic minimum needed to respond to obstetric emergencies prior to the implementation of any health education, communication or mobilisation interventions was one of the important lessons learned.[106] Strong community leadership and the active involvement of community members were also identified as essential components to an intervention's success.

Community-Based Research Addressing the Role of Men

Although not very common, there are a few examples in literature that describe the role of men in safe motherhood, as indicated below.

Bangladesh

MotherCare's recent evaluation of the maternal health component of Bangladesh's Population and Health Program highlights areas where male involvement within the context of maternal health services already exists and where it can be strengthened. For example, the report notes that a large number of health assistants are already engaged in conducting home visits in an effort to distribute vitamin A capsules more widely and identify malaria cases in the community. At the same time, however, men working within the health sector – from health care assistants to family planning inspectors – are not always well prepared to reach men on an interpersonal level. The report suggests that this is a lost opportunity, particularly since men are the primary decision-makers when maternal health care for their wives, daughters, sisters and daughters-in-law is needed.[107]

Ghana

Focus group discussions with members of a Ghanaian rural community revealed an overall lack of confidence in the health services. After health facilities were upgraded, project staff sought the help of Ministry of Health outreach workers, public health nurses, midwives, village health committees, and district health management teams to mobilise communities through health education around safe motherhood issues. Emergency loan funds to help people, with medical and transportation costs for women with obstetric complications, were established in six communities. The participation of particular groups of men in the community in the mobilisation efforts was sought. These included local religious leaders and members of the local union of transport workers. Overall, the number of women with obstetric complications seeking treatment increased in the community. According to the authors, these results suggest that community mobilisation targeted at specific groups in the community can be an effective means of improving maternal health outcomes.[103]

Sierra Leone

Focus group discussions conducted in a rural Sierra Leonean community revealed that access to emergency obstetric care was hindered both by inadequate awareness of obstetric complications and by difficulty in reaching health facilities. After upgrading health services, project staff and staff from the Ministry of Health trained young and middle-aged men as community health motivators for maternal health. Their duties included health education, formation of village action groups for emergency transport, and the facilitation of referrals for women with obstetric complications. Although the training of exclusively male community motivators may on first glance appear problematic, the authors state that this decision was based on the fact that men in that particular community had more leisure time than women, and thus were able to travel freely in the villages, especially at night.[108]

Nigeria

Preliminary research through focus group discussions in northwest Nigeria revealed that delays in emergency treatment were the result of vehicle and fuel shortages, and the unwillingness of drivers to

transport women at affordable prices. After the local health facilities were upgraded, local transport union workers were sensitised to the issue of obstetric complications and maternal mortality. A revolving fuel fund was also set up. Over a two-year period, 29 women with obstetric complications were transported, with only one death. Although the fuel fund was eventually depleted, transport workers were willing to transport women even in the absence of an upfront payment.[109]

Nepal

The Community and Family Level Support Network, a network of international and locally-based NGOs in Nepal, was established to increase the awareness of safe motherhood issues at the community level through mass media campaigns, including local dance troupes, roving health educators, and plays launched at public festivals. The campaign also included a focus on the role and responsibility of men in reproductive health and safe motherhood. Because many men are engaged in migrant labour, health education messages highlighting men's responsibilities were incorporated in the local annual festivals that coincided with men's annual leave at home. The authors note that in order to attract men and their families during these festive occasions, activities were designed to be entertaining as well as educational.[100]

Proposed Strategies for Involving Men

Women continue to die both in the community and within health care facilities as a result of complications related to pregnancy. As the paucity of existing literature on men's participation in women's reproductive health suggests, there is a need for broadening strategies. The development and implementation of strategies that specifically target men in their various roles in the community might be one way of addressing the continuing tragedy of maternal deaths. These interventions, such as health education materials and community mobilisation campaigns, should aim to sensitise men on the risk factors and danger signs associated with poor maternal health outcomes and mobilise them to respond appropriately. It is anticipated that these interventions will result in men taking more interest in the health-care seeking behaviour of women during and following pregnancy. It is also hoped that such interventions will promote increased interspousal communication on maternal health problems, including recourse to care during pregnancy and following delivery.

As literature on community participation suggests, these intervention strategies should be developed, tested and evaluated in collaboration with the study communities. Such strategies might entail the design of community-based operations research to develop and test risk awareness materials. Baseline assessment prior to the development of culturally appropriate interventions could entail a combination of qualitative and quantitative research methods to identify the gaps in men and women's knowledge and their perceptions of maternal ill-health risk factors. An identification of the sociocultural and economic factors that affect maternal health-seeking behaviour in positive and negative ways would also be an important focus of the initial assessment.

Several methods of qualitative assessment should be considered: focus groups of men and women (including adolescents and health care providers in the formal and informal health systems), observations within the community and within formal and informal systems of health care, semi-structured interviews, and in-depth interviews with key informants. Results of the qualitative research could then be used to develop a survey questionnaire to document the pattern of health care-seeking behaviour and identify the social, cultural and economic barriers to maternal health care within specific settings. This survey questionnaire would enable researchers to determine the extent of the gaps in knowledge. Responses elicited through qualitative methods described above are often generalisable to the community at large. As previous research has already indicated, it is expected that operational factors will come into play at the level of the family, the community, and within the health services systems, although the way that they are manifested, as well as their consequences for maternal health, may be different.

Taking the above issues into account, the development of community-based interventions to involve men in promoting safe motherhood might consider the following objectives and endpoints:

- Increase men and women's awareness of the signs and symptoms associated with obstetric

complications, such as fever, excessive bleeding, paleness, persistent headaches and fitting, and foster appropriate response.

- Improve awareness of the risks associated with closely spaced births, high parity, young age at first birth and possible complications of unsafe abortion.
- Improve awareness of how sexually transmitted infections can lead to health complications in the mother and infant.
- Improve family and community members' response to danger signs associated with obstetric complications.
- Develop community-based solutions for emergency transport for pregnant women within communities.
- Identify how sociocultural factors and perceptions of maternal risk contribute to inaction and delays in decision-making within the family, the community, and the health care system, and develop and test appropriate solutions.
- Identify how a lack of economic resources affects recourse to care during different stages of a woman's pregnancy and encourage development of appropriate solutions.
- Identify how macro level policies have an impact on people's access to economic resources and thus affordable, quality health care within the community.
- Develop and use information, education and communication materials for increasing reproductive health awareness at the household and community levels and of the risk factors and danger signs associated with poor maternal health.
- Encourage the use of antenatal care facilities.
- Encourage health care workers to interact positively with community members in general and their pregnant clients in particular as a means to promoting safe motherhood concepts within the formal health care system.
- Identify and promote culturally appropriate routine strategies geared to encouraging men to respond in a timely and appropriate manner to maternal health needs within the community.
- Develop culturally appropriate strategies that aim to support existing positive behaviour conducive to improving maternal health outcomes.
- Mobilise communities in general to identify and act upon maternal health problems as a means to promoting safe motherhood at the family and community levels.
- Encourage attendance at delivery by a skilled health worker, and recourse to health care services in the event of complaints associated with reproductive risk factors.

Conclusions

Much work remains to be done to improve the maternal health situation of women in developing countries. Research on maternal mortality during the first decade of the Safe Motherhood Initiative has demonstrated that the alleviation of suffering of women from pregnancy-related causes requires innovative and multi-pronged approaches that go beyond the traditional focus on biomedical interventions. Inherent in the challenge of reducing maternal mortality is the recognition that there is no one magic bullet in our prevention efforts. This paper has highlighted one of the least considered strategies for improving maternal health: the sensitisation and mobilisation of communities, with emphasis on including men in their various roles within the community. Such efforts should complement biomedical strategies that should be in place for improved reproductive health care delivery.

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