

Medical Implications for Home Births vs. Hospital Births

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Abstract

In this study, mixed outcomes arise regarding the debate of whether to opt for home births or hospital births. Whereas hospital births are advantageous for mothers at risk for medical interventions, especially after the onset of labor, home births prove beneficial and less costly for low-risk women. In hospital settings, emergency equipment and personnel are available in case of the need for medical attention or the mother develops complications, making the setting more preferable than home births that require last-minute transfers to hospitals – in case of medical problems, putting both the mother and the unborn child at risk. It is also notable that for the case of hospital births, there is the availability of immediate pediatric attention, implying that the baby does not necessarily have to be taken off-site for the pediatrician's routine examination. However, home births tend to be preferred because women have control over the birthing process and are less likely to be exposed to infections, which is the case for hospital births that are associated with hospital-acquired infections in some cases.

Introduction

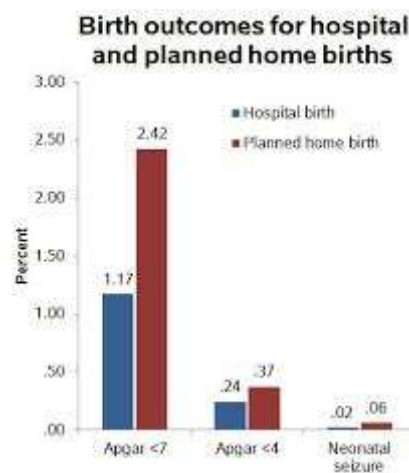
Planned home births reflect one of the most rewarding experiences for women. However, appropriate planning calls for the consideration of some of the drawbacks and benefits with which home births are associated. In particular, Blix, Kumle and Ingversen et al. (2016) stated that for planned home births, the need to understand and consider some of the risks linked to this option could not be overstated. As indicated by Bolten, de Jonge, Zwagerman, Zwagerman, Klomp and Zwart et al. (2016), planned home births refer to situations where individuals give birth at home, having opted out of the services of birthing centers or hospitals. Of importance to note is that even for individuals who prefer home births, they require the assistance of qualified and experienced persons relative to the delivery and labor periods. Some of these individuals include doctors who practice obstetrics, midwives whose licensure and education meet international standards, certified midwives, and certified nurse-midwives (de Jonge, Geerts & van der Goes et al., 2015).

Methods

Indeed, mixed outcomes have been reported regarding the risks surrounding hospital births and those surrounding home births. Whereas home births might appear riskier on the surface due to the perceived role of the environment in which the births occur and also a likelihood of having fewer practitioners on the standby, other studies suggest that low-risk women giving births in hospitals have increased chances of their babies' neonatal or perinatal deaths compared to women in well-resourced settings who opt to give birth at home (Grünebaum, McCullough & Sapra et al., 2017). For such studies, there is no statistically significant difference or clinically important risk between hospital and home groups. Apart from the economic status of the family and resource endowment in a country, another parameter that comparative studies have used to give insight into the debate between home births vs. hospital births involves the mode of delivery. For studies

adopting the latter approach, the majority contend that giving birth at home is not safe for all women. Particularly, the studies affirm that for women such as those who might have been pregnant with multiples (such as triplets or twins) and also had C-section previously, giving birth at home is riskier (Hazen, 2017). In this paper, the central purpose is to discuss the subject of home births versus hospital births, with particular emphasis on some of the merits and demerits or risks with which each option is associated. The study adopts a secondary analysis approach, collecting and analyzing information from sources such as journals and e-books.

Results



For each option, whether home birth or hospital birth, proponents and opponents hold different views. According to Hutton, Cappelletti, Reitsma, Simioni, Horne and McGregor et al. (2016), several beneficial attributes point to the need to support and opt for home births. For example, the study indicated that home births are worth supporting because they allow women to deliver in familiar settings and also enable them to exercise control over the delivery experience. These observations concurred with those made by Hutton, Reitsma, Simioni, Brunton and Kaufman (2019), who noted that home births are worth considering because the settings in which women give birth are comfortable and familiar and that they are unlikely to come under pressure to use interventions or medications. In a related investigation, Leone, Mostow and Hackney et al. (2016) stated that there are chances of reduced price tag when home births are preferred because hospital-related expenditures arising from admission fees and potential increased lengths of stay are avoided. Zielinski, Ackerson and Kane (2015) stated further that based on cultural and religious considerations, home births are worth preferring because patients have more control on the delivery process, considerations that could be contravened when they opt for hospital births.

However, those who oppose home births cite various reasons. For instance, MacDorman and Declercq (2016) observed that most of the insurance service providers are unlikely to cover any associated costs because the births do not occur in hospital settings. Based on this observation, another study by Blix, Kumle and Ingversen et al. (2016) indicated that the perceived benefit of home births accruing from reduced healthcare expenditure is likely to be compromised whereby the possibility of insurance failing to cover the associated costs implies that home births tend to increased out-of-pocket costs for patients. Should the cost-saving (due to the avoidance of hospital

services) surpass this perceived out-of-pocket expenditure for home births, an additional dilemma or question that arises is whether the difference is statistically significant.

According to Bolten, de Jonge, Zwagerman, Zwagerman, Klomp and Zwart et al. (2016), the comfortable and familiar environment that home births provide imply that pregnant mothers are unlikely to experience potential elements of fear and uncertainty, with de Jonge, Geerts and van der Goes et al. (2015) stating that the latter attributes occur in most cases when women visit hospitals – due to the unfamiliarity of the environment. As indicated by Grünebaum, McCullough and Sapra et al. (2017), this enabling nature of the home environment tends to counter the perceived drawback of hospital births whereby the unfamiliar environment in the latter cases implied that there could be increased chances of fear and uncertainty, which prolong or inhibit labor. Even in situations where women who opt for home births are transferred later to hospitals while in labor, Hazen (2017) documented that the initial comfort in the home environments implies that they are less likely to undergo C-section compared to those who might have been booked for hospital births directly. The merit has been observed to be complemented by situations in which home births provide room for increased lengths of interaction between midwives and patients and their families (due to fewer numbers of patients that the midwives are expected to attend to), translating into a promising state of patient-centeredness (Hutton, Cappelletti, Reitsma, Simioni, Horne and McGregor et al., 2016).

However, the lack of enough medical facilities in home settings involving planned home births implies that there is limited pain relief. As asserted by Hutton, Reitsma, Simioni, Brunton and Kaufman (2019), a specific example is a case in which an epidural might be unavailable at home. Should there be complications, the situation and medical procedure surrounding home births prove more complicated, forcing midwives to make quick arrangements for the transfer of patients to a hospital. Hence, the mixed outcomes regarding risks and beneficial aspects linked to home births have led some studies to conclude that a hospital, which offers a special care baby unit or a high level of medical care, is the most appropriate setting in which women could give birth. In one of such investigations, Leone, Mostow and Hackney et al. (2016) found that given that it is in the hospital that obstetricians work, facilities that could enable them to look after women requiring higher levels of intervention are available, making hospital births less risky than home births. It is also notable that hospital births outperform home births in terms of facility availability whereby the hospital settings house facility for doing Caesarian deliveries, as well as instrumental (ventouse or forceps) deliveries (Zielinski, Ackerson and Kane, 2015). Furthermore, home births' setting familiarity is seen to reduce fear and uncertainty and pose a trickle-down effect of reduced lengths of labor, but hospital birth settings outperform the home settings whereby they offer a full range of options for pain relief. As documented by Bolten, de Jonge, Zwagerman, Zwagerman, Klomp and Zwart et al. (2016), one of the options to which women opting for hospital births could gain access includes epidural.

However, hospital births also come with several drawbacks, complicating the debate of whether home births should be preferred in the place of hospital births or vice versa. For instance, a study by Blix, Kumle and Ingversen et al. (2016) revealed that when women prefer hospital births, they are more likely to have higher risks of infection, as well as interventions that include pain relief, drips that speed up contractions, Caesarean section, instrumental delivery, and an episiotomy.

Also, most of the midwives serving on hospitals' labor wards tend to attend to many women, implying that one-to-one care is less likely to be achieved, hence a compromised state of patient-centeredness (MacDorman & Declercq, 2016). Also, many women who opt for hospital births have reported a lack of choices in hospital contexts. According to Zielinski, Ackerson and Kane (2015), some women state that their voices go unheard. A specific example is a case in which certain interventions are implemented, but the women perceive them as unnecessary, including the provision of pain medications. Hence, hospital births tend to take away the choice of women. By excluding them from the decisional control or decision-making process, hospital birth procedures translate into dissatisfaction among the majority of the women (de Jonge, Geerts & van der Goes et al., 2015). The eventuality is that when the factor of decisional control is considered, home births prove worthy because they afford the women an opportunity for empowerment, as well as greater control. The overall trend is that home births tend to make women part of the decision-making team more than hospital births in which certain interventions and pain medications are implemented by medical practitioners. Hence, home births allow the women to gain competency and also believe in themselves, eventually making their decisions; a predictor of patient satisfaction.

Based on the observations above, it is evident that several factors inform some women's decision to opt for home births. Some of these factors include lower costs, a lack of access to transportation, religious or cultural concerns, a desire for control and freedom in the process of birthing, dissatisfaction with hospital care, and a desire to give birth in a familiar and comfortable environment. However, Grünebaum, McCullough and Sapra et al. (2017) cautioned that the majority of women who prefer home births deliver with little or no complications but planned home births pose a higher risk of infant seizures and deaths than hospital births. For other studies, situations where low-risk women have qualified attendants and adequate prenatal care imply that home births are safer than hospital births. In most of the home birth cases, labor is left to progress normally with minimal intervention and interference, with reduced risks of infection (for both the baby and the mother) reported – compared to higher risks of hospital-acquired infections (HAIs) when women opt for hospital births (Hazen, 2017). However, the home birth option implies that analgesics are not readily available, and the option calls for transport arrangement to access these and related medical interventions.

Conclusion

In summary, mixed outcomes arise regarding the debate of whether to opt for home births or hospital births. Whereas hospital births are advantageous for mothers at risk for medical interventions, especially after the onset of labor, home births prove beneficial and less costly for low-risk women. In hospital settings, emergency equipment and personnel are available in case of the need for medical attention or the mother develops complications, making the setting more preferable than home births that require last-minute transfers to hospitals – in case of medical problems, putting both the mother and the unborn child at risk. It is also notable that for the case of hospital births, there is the availability of immediate pediatric attention, implying that the baby does not necessarily have to be taken off-site for the pediatrician's routine examination. However, home births tend to be preferred because women have control over the birthing process and are less likely to be exposed to infections, which is the case for hospital births that are associated with hospital-

acquired infections in some cases. Overall, home births could be preferred because they provide room for sharing experience and are associated with lower costs, but hospital births are also preferable because of enhanced safety, backup medical care, and technology. As such, the chief factor that pregnant women ought to consider before deciding whether to opt for home births or hospital births includes the level of risk of the mother. Whereas low-risk women could opt for home births, high-risk women ought to opt for hospital births.

References

- [1]. Blix, E., Kumle, M. H. & Ingversen, K. et al. (2016). Transfers to hospital in planned home birth in four Nordic countries - a prospective cohort study. *Acta Obstet Gynecol Scand*, 95, 420
- [2]. Bolten, N., de Jonge, A., Zwagerman, E., Zwagerman, P., Klomp, T. & Zwart, J. J. et al. (2016). Effect of planned place of birth on obstetric interventions and maternal outcomes among low-risk women: a cohort study in the Netherlands. *BMC Pregnancy Childbirth*, 16(1), 329
- [3]. de Jonge, A., Geerts, C. C. & van der Goes, B. Y. et al. (2015). Perinatal mortality and morbidity up to 28 days after birth among 743 070 low-risk planned home and hospital births: a cohort study based on three merged national perinatal databases. *BJOG*, 122, 720
- [4]. Grünebaum, A., McCullough, L. B. & Sapra, K. J. et al. (2017). Planned home births: the need for additional contraindications. *Am J Obstet Gynecol*, 216,
- [5]. Hazen, H. (2017). "The First Intervention Is Leaving Home": Reasons for Electing an Out-of-hospital Birth among Minnesotan Mothers. *Med Anthropol Q*, 31, 555
- [6]. Hutton, E. K., Cappelletti, A., Reitsma, A. H., Simioni, J., Horne, J. & McGregor, C. et al. (2016). Outcomes associated with planned place of birth among women with low-risk pregnancies. *CMAJ*, 188(5), 80-90
- [7]. Hutton, E. K., Reitsma, A., Simioni, J., Brunton, G. & Kaufman, K. (2019). Perinatal or neonatal mortality among women who intend at the onset of labour to give birth at home compared to women of low obstetrical risk who intend to give birth in hospital: A systematic review and meta-analyses. *EClinicalMedicine*, DOI: 10.1016/j.eclinm.2019.07.005
- [8]. Leone, J., Mostow, J. & Hackney, D. et al. (2016). Obstetrician Attitudes, Experience, and Knowledge of Planned Home Birth: An Exploratory Study. *Birth*, 43, 220
- [9]. MacDorman, M. F. & Declercq, E. (2016). Trends and characteristics of United States out-of-hospital births 2004–2014: new information on risk status and access to care. *Birth*, 43(2), 116-124
- [10]. Zielinski, R., Ackerson, K. & Kane, L. L. (2015). Planned home birth: benefits, risks, and opportunities. *Int J Womens Health*, 7, 361