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Assessment of the implementation of the model of integrated and humanised midwifery health services in Santiago, Chile

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ABSTRACT

Objectives: during 2007 the Chilean Ministry of Public Health introduced the Model of Integrated and Humanized Health Services, in addition to the Clinical Guide for Humanized Care during Delivery. Three years after its implementation, a study was conducted (i) to describe selected clinical outcomes of women who received care within this model, (ii) to identify the degree of maternal–newborn well-being and (iii) to explore the perception of this humanised attention during labour and delivery by both the professional staff (obstetricians and midwives) and consumers.

Design and method: a cross-sectional, descriptive study using both quantitative and qualitative methods was conducted with 508 women who delivered in two major hospitals within the National Health System in the metropolitan area of Santiago, Chile, from September 2010 until June 2011. The quantitative methods included a validated survey of maternal well-being and an adapted version of the American College of Nurse-Midwives (ACNM) standardised antepartum and intrapartum data set. The qualitative methods included six focus groups discussions (FGDs), with midwives, obstetricians and consumers. Additionally, two in depth interviews were carried out with the directors of the maternity units.

Findings: the quantitative findings showed poor implementation of the guidelines: 92.7% of the women had medically induced labours (artificial rupture of the membranes and received oxytocin and epidural anaesthesia), and almost one-third of the women reported discontent with the care they received. The qualitative findings showed that the main complaint perceived by the midwives was that the health system was highly hierarchical and medicalised and that the obstetricians were not engaged in this modality of assistance. The women (consumers) highlighted that professionals (midwives and obstetricians) were highly technically skilled, and they felt confident in their assistance. However, women complained about receiving inadequate personal treatment from these professionals. The obstetricians showed no self-critique, stating that they always expressed concern for their patients and that they provided humanised professional assistance.

Conclusions and implications for practice: by illuminating the main strengths and weakness with regard to the application of the model, these findings can help to inform strategies and actions to improve its implementation.

Introduction

Humanistic health care means recognising users as a 'subject' not as an 'object.' This involves a move from paternalism to responsible autonomy, from medicalisation and technocracy to respect of the natural timing of normal delivery, while considering every woman as unique. This is, therefore, a women centred model (Lobo, 2002). Humanisation is nothing else than an active search to a closer relationship with a human being, offering the best health care attention (CMPH, 2007a).

Health attention that is humanistic encourages women to eat and drink at free will during labour, bring a companion of their choice, facilitate movement during labour and upright position for birth. Davis-Floyd defines two kinds of humanism, a superficial one 'in which the room is pretty, and the mother is treated kindly,

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but the intervention rate does not decrease; this is not the same as deep humanism 'in which the *normal physiology of birth* is honored' (Davis-Floyd, 2001).

Over the past three decades, Latin American countries have started a social movement towards humanisation of birth. As rates of caesarean sections rise, many undesirable outcomes such as prematurity, maternal infection and death tend to increase due to sections (Villar et al., 2006). Therefore, a larger number of consumers and health professionals are working together in trying to modify this practice. Health care in many Latin American hospitals (varying among institutions) is based upon a highly medicalised model of birth—enemas, lithotomy position, episiotomies and unnecessary caesarean sections, all with scarce companionship or support.

Chile has a mixed health system (public and private) in terms of financing, health insurance, and service delivery. The public system is finally supported by the National Health Fund, which covers almost 75% of the population. Additionally, the public system covers health care for 100% of the poorest population, including maternal and infant health (PAHO, 2011). With regard to sexual and reproductive care, midwives are usually the main health professionals providing normal birth assistance, whereas obstetricians are well trained to carry out the responsibility for solving obstetrical pathology (Davis-Floyd, 2001). In accordance with WHO/ICM and FIGO definitions, the main professional responsibility of a midwife is to dispense sexual, reproductive and perinatal health care (ICM, 1992). At present, Chilean midwifery training comprises a five year university programme, covering most of the activities stated in Women's Health Program commanded by the Chilean Ministry of Public Health (CMPH, 2007b). They provide the majority of gynaecological and obstetrics primary care activities, assisting normal labour and deliveries in the public system, working in collaboration with obstetricians (Segovia, 1998).

Chile is well recognised among Latin American countries for its improved maternal and neonatal indicators (PAHO, 2006, 2008, 2011) and its positive impact on the reduction of maternal and infant mortality. During the past seven years, however, this trend has stabilised. If maternal and infant mortality does not continue to decrease, the millennium goal of reducing maternal mortality will not be accomplished (CMPH, 2008).

Chile has one of the highest rates of caesarean section (30.7%) of the region (Gibbons et al., 2012). This figure has been considered as an indicator of the quality of maternal and perinatal assistance (WHO, 1985). In line with this, the objectives stated by the Chilean Ministry of Public Health in 2000 (CMPH, 2011), are to improve health indicators, decrease health inequalities, and provide high quality services, in accordance with the expectations of the population. In 2007, the Chilean Ministry of Public Health adopted the 'Model of Integrated and Humanized Health Services' (CMPH, 2007a), and specifically, the Clinical Guide for Humanized Care during Delivery. The main objective of these guidelines is to guarantee access to all pregnant women in Chile for appropriate professional assistance during labour and delivery, as well as 'achieving a safe, personalised and human delivery.' This assistance highlights continuous emotional support, minimising intrapartum fetal monitoring, offering different pain relief alternatives (pharmacological and non-pharmacological), promoting different positions that allow free movement, reduction of episiotomy, avoiding enemas and trichotomy, also promoting mother and child bonding (CMPH, 2007b).

Therefore, after three years of the implementation of the Clinical Guide for Humanized Care during Delivery, midwifery researchers from the University of Chile conducted a study with the following objectives: (i) to describe selected clinical outcomes of women who received care according to this new guide, (ii) to identify the level of maternal–neonatal well-being after experiencing this modality of attention, and (iii) to explore the perception of this humanised assistance during labour and delivery by professional staff (obstetricians and midwives) and consumers. This paper is a report of this study.

Material and methods

A cross sectional, descriptive study using both a quantitative and qualitative methods, was conducted with 508 women who delivered at two major hospitals within the National Health System in the Metropolitan Area, Santiago, Chile from September 2010 until June 2011.This methodological design allowed a better understanding of the problem under study(Creswell and Plano-Clark, 2007). The quantitative method was used during the first stage of the study in order to assess the following objectives: (i) to describe selected clinical outcomes of the women enroled receiving care according to this new guide (ii) to identify the level of maternal–neonatal well-being after experiencing this modality of assistance. Inclusion criteria included primiparous and multiparous women who were admitted in the labour ward with 2–3 cm of cervical dilatation, whose physiological labour was a minimum of 4 hours; these criterions ensured that participating women could make a choice regarding different options offered by the guide. For multiparous women, an interconception period not greater than 3 years was considered to assure a possible comparison of their perception with regard the prior model. Another criterion was capacity to give and signed an informed consent. Women with mental health problems or drug abuse were excluded from this study. The planned sample size was estimated based on the assumption that each item of the guideline was accomplished 50% of the time. Therefore, the sample size to test this hypothesis with a 95% confidence interval and a maximum acceptable error of 5% was of 400 women.

Data collection: All quantitative data were collected in the postpartum ward by midwifery students attending their last course (5 years), previously trained specifically for this purpose, and supervised by members of the research team. To gather data for objective (i) an adaptation of the Intrapartum Data Set Care, developed by the American College of Nurse-midwives (ACNM), validated in 1991 (Greener, 1991) and published in1999 (copyright) for educational or research purposes (ACNM, 2010). This instrument was translated to Spanish and adapted to the Chilean context by the research team and assessed by an expert committee from Emory University Atlanta-USA. These data as well as the sociodemographic background were obtained from the medical records, and if necessary, interviewing participants, and for the objective (ii) the Maternal Well-Being Assessment Scale (Uribe et al., 2008), (validated in Chile) through an interview performed to participants who accomplished inclusion criteria.

Data analysis: Continuous variables were described through percentiles, mean and standard deviation; categorical variables were described in terms of frequencies and proportions. Continuous variables were compared by *t*-Student test and categorical variables were compared by Fisher's Exact test between maternity hospitals. A data base was constructed through an excel file and data were analysed through the statistical package STATA, version 12.0. Significance level was 5% and confidence intervals were 95%.

The qualitative method was used in the second stage of the study to address objective (iii) to explore the perception this humanised attention during labour and delivery by both the professional staff (obstetricians and midwives) and consumers. The participants were women meeting the same inclusion criteria but not necessarily the same participants interviewed in the quantitative phase of the study. They were recruited as volunteers

(those who respond actively to the invitation) (Hernández et al., 2010). Participants were also midwives and obstetricians working in the labour wards for at least three years, as well as those having supervisory positions on the units.

Data collection: All qualitative data were collected by the research team, through focus groups discussions (FGDs) conducted in separate and private rooms with three different groups, consumers, midwives and obstetricians, one with each group of participants in each maternity unit. The data collected was sufficient to reach saturation criteria (Kitzinger, 1995). In depth interviews were held with each director of the two maternity hospitals involved in the study, to assure the independence of the other health professionals and as a method to ensure confirmability. All participants were aware of the objectives of the study and signed an informed consent. A discussion guide was used in each FGDs, with no less than four and no more than eight participants, in order to allow each participant to freely express his/her experience and perception (Morgan, 1988; Patton, 1990; Umaña-Taylor and Bámaca, 2004). A moderator and facilitators were both members of the research team and previously trained in this technique, all FGDs were audiotape-recorded.

Data analysis: All the interviews were transcribed verbatim and analysed following the steps proposed by content analysis (Graneheim and Lundman, 2004; Hsieh and Shannon, 2005). Text was coded and categorised by the research team, and these categories were discussed and compared critically by the research team as a form of triangulation in order to guarantee trustworthiness (Lincoln and Guba, 1985).

Ethical consideration

Ethical approval to conduct the study was obtained from the Ethical Committee for Research on Human Beings at the Faculty of Medicine, University of Chile and the local Ethical Committee at each Maternity participating in the study. Participants were assured that data were confidential and all participants signed an informed consent before enrolment in the study (WMA, 2004).

Findings

Quantitative findings

Sociodemographic background of participants are described in Table 1, as described above, the hospitals where participating women delivered belong to the public system therefore, participants showed similar sociodemographic characteristics; mean age was 24 years, the marital status revealed that 14.6% were married, most of participants were cohabitants (40.7%), and the rest single (44.7%). Most of the participants attained complete secondary education.

Table 1
Sociodemographic characteristics of women.

Sociodemographic variables	Participants N=508
Age mean (SD)	24 (6.1)
Range of age	14–43
Marital status N (%)	
Married	74 (14.6)
Single	227 (44.7)
Cohabitant	207 (40.7)
Level of education N (%)	
Basic	66 (13)
Secondary	372 (73)
Higher complete/incomplete	69 (14)

Selected clinical outcomes are presented in Table 2. We present the findings from the two maternity hospitals separately to show the similarities or differences among the health centres. Whereas some variables, such as being accompanied during labour, or the use of continuous fetal monitoring, showed differences between hospitals, most of the other variables under study had a similar outcome. Under 49% of the participants were primiparous, the rest were multiparous, and the mean gestational age was 38.6 weeks. During labour, more than 80% of women received pharmacological medication for pain relief, most of the women (77.4%) did not walk, most of the women were under continuous fetal monitoring (81.7%), most of the women did not receive any kind of oral hydration (94.3%). On the contrary, almost all received parenteral hydration. A total of 92.7% of women had medically induced labours (artificial rupture of the membranes and received oxytocin and epidural anaesthesia). During delivery 86.6% of women were in lithotomy position, and 54% had an episiotomy. Almost 70% of the women were accompanied by a significant person during labour, which increased to 87.1% during delivery.

Regarding the assessment of maternal well-being, 40.2% of women reported optimum satisfaction with the given care, 32% of women considered adequate (indifferent), finally, 27.8% of the women reported discontent with the health care they received.

Qualitative findings

Findings in this study are reported in terms of strengths and weakness regarding the implementation of the humanised model of attention, after data analysis two main themes emerged.

Providing humanistic care

Midwives maintained that their main strengths included a strong professional education complemented by a genuine interest to provide a humanised care to women:

> I considered that we have a strong professional formation and we have been always interested in providing humanistic care, even before this guide was implemented (FGD 1).

Midwives also considered that they were insufficiently empowered in their role while attending a normal delivery, and implied that women were also not empowered about their reproductive process:

> Neither midwives nor women are empowered enough to question a medical prescription; both of us just follow the indication (FGD2).

Midwives feared possible suits due to professional malpractice:

> Today suits are very frequent and we are exposed and afraid about this; we have no protection and the press highlights this fact (FGD2).

Women participants from the focus groups discussions perceived that professionals (midwives and obstetricians) were highly technically skilled, and they felt confident in their assistance. The main weakness reported by the women was that they were not even aware of the current humanised model of assistance; therefore they could not go through a proper decision-making process:

> Nobody told me about this model or guide, and that I can chose different alternatives, to me this is the same assistance I received during my last delivery, nothing has changed (FGD 2).

Table 2
Selected obstetrics outcomes.

Variables	Maternity 1 n=250	Maternity 2 n=258	*p* Value	Total n=508	CI
Cesarean section N (%)	65 (16.2)	42 (16.3)	*p* 0.9756	107 (21.1)	
Parity N (%)					
Primiparous	128 (51.2)	121 (46.9)		249 (49)	
Multiparous 1	105 (42)	107 (41.47)	*p* 0.158	212 (41.7)	
Multiparous 2 or more	17 (6.8)	30 (11.63)		47 (9.3)	
Gestational age (weeks)					
mean (SD)	38.7 (2.1)	38.6 (1.5)		38.6 (1.8)	
Nutrition (feeding) during labour N (%)	236	258	*p* 0.2280	494	
No oral nutrition	227 (96.1)	239 (92.6)		466 (94.3)	[89,0; 94,0]
Liquid nutrition	7 (2.9)	14 (5.4)		21 (4.2)	
Light nutrition	2 (1)	5 (2)		7 (1.5)	
Parenteral hydration during labour N (%)	250	258	*p* 0.3168	508	
Yes	250 (100)	257 (99.6)		507 (99.8)	[98,9; 100]
No	0	1 (0.4)		1 (0.2)	
Fetal intrapartum monitoring N (%)	249	258	*p* 0.0000	507	
Initially	5 (2)	2 (0.8)		7 (1.3)	
Paucity during labour	68 (27.3)	18 (7)		86 (17)	
Continuous during labour	176 (70.7)	238 (92.2)		414 (81.7)	[77,8; 84,8]
Membrane status N (%)	232	258	*p* 0.0000	508	
Spontaneous rupture during labour	54 (23.3)	97 (37.6)		151 (30.8)	
Artificial rupture during labour	148 (63.7)	154 (59.7)		302 (61.6)	[55,0; 63,8]
Rupture during third stage	30 (12)	7 (2.7)		37 (7.6)	
Medically induced labour N (%)	250	258	*p* 0.0337	508	
Yes	238 (95.2)	233 (90.3)		471 (92.7)	[90,1; 94,8]
No	12 (4.8)	25 (9.7)		37 (7.3)	

Variables	Maternity 1 n = 250	Maternity 2 n=258	p value	Total CI n=508
Method of pain relief N (%)	244	253	p 0,039	497
Pharmacological	214 (87.7)	208 (82.2)		422 (84.9) [79,52; 86,23]
No pharmacological	1 (0.4)	8 (3.2)		9 (1.8)
Mixed	29 (11.9)	37 (14.6)		66 (13.3)
Free walking during labour N (%)	250	258	p 0,5901	508
Yes	54 (21.6)	61 (23.6)		115 (22.6)
No	196 (78.4)	197 (76.4)		393 (77.4) [73,47; 80,93]
Use of kinesic balloon N (%)	250	258	p 0,5026	508
Yes	7 (2.8)	5 (1.9)		12 (2.3)
No	243 (97.2)	253 (98.1)		496 (97.6) [95,91; 98,77]
Companion during labour N (%)	250	258	p 0,000	508
Yes	113 (45.2)	226 (87.6)		339 (66.7) [62,45; 70,8 2]
No	137 (54.8)	32 (12.4)	p 0,000	169 (33.3)
Maternal posture during third stage N (%)	247	218		465
Lithotomy	183 (74.1)	217 (99.5)		400(86.1) [74,92; 82,22]
Other	64 (25.9)	1 (0.5)		65 (13.9)
Episiotomy N (%)	227	217	p	444
Yes	128 (56.4)	127 (58.5)	0,701	255(57.4) [45,76; 54,63]
No	99 (43.6)	90 (41.5)		189 (42.6)
Companion during third stage N (%)	225	258	p	483
Yes	187 (83.1)	234 (90.7)	0,014	421 (87.1) [79,31;86,05]
No	38 (16.9)	24 (9.3)		62 (12.9)
Maternal wellbeing during labour N (%)	249	258	p	507
Satisfaction	93 (37.3)	111 (43)	0,067	204 (40.2)
Adequate	75 (30.1)	87 (33.7)		162 (32)
Disconformity	81 (32.6)	60 (23.3)		141 (27.8)

[ ]: Confidence interval for proportion (CI).

Furthermore participants complained that they received inadequate personal treatment from the professional staff and also from the auxiliary personnel:

> They do not listen to me, I felt that we are treated like an object, many procedures without being informed or asked about (FGD1).

Some of obstetricians perceived that their main strength was the fact that they had always been concerned about women, and therefore were providing a humanised professional assistance prior to the new guidelines:

> Could you please tell me what is a humanistic care? I have always provided a humanistic attention to women (FGD1).

The medical staff also reported little collaboration from the midwives, and poor medical student training of this model:

> Some midwives are usually pressing us to speed up the process by giving oxytocin or by the rupture of membranes (FGD 2).

Health system structure and facilities

In general all the participants complained about inadequate facilities to support this kind of model in which more privacy is needed and also more space to receive the family and being always accompanied.

Among the weakness reported by the midwives, the main complaint was the highly hierarchical and medicalised health system, also that obstetricians were not engaged, not interested and they did not participate in the training when the new guidelines were issued:

> It is very difficult to work in this structure were doctors always have the first place, many procedures are done for 'if something happens', rather than if it is really necessary (FGD1).

Women complained about facilities, little space and that it was uncomfortable to receive family visits, no privacy. Obstetricians also reported an inadequate facility as a weakness in following the guidelines:

> When our family comes to visit, there is not enough space, it is very uncomfortable, many people in a little room (FGD1).

Discussion

It has been described that Latin America is the world's region with the highest inequalities in income distribution, with great heterogeneity within the region. In particular, the reduction of disparities in maternal and infant mortality rates within countries remains modest (ECLAC, 2004). As noted in the introduction, the main objective of the humanised model of care, is to guarantee access to all the pregnant women in Chile adequate professional assistance during labour and delivery, as well as to 'achieve a safe, personalised and human delivery,' highlighting continuous emotional support (CMPH, 2011). Findings in this study reported that in Chile, we are still far from achieving this goal. Although there is a real need and evidence based reasons for the implementation of this humanised model of assistance, little has changed in these hospitals under study, since the clinical guidelines were published.

The biomedical model has historically been of central relevance in the improvement of obstetric and neonatal care, and its impact can be reflected in the important reduction of maternal and infant mortality and morbidity over time. At the same time, this model has had an important and increasing tendency to medicalise a physiological process, with a concomitant increase in the rate of caesarean section (Lavender et al., 2006; Lee and D'Alton, 2008). In this study, results showed that even after three years since the guidelines were published, the rate of caesarean section for obstetric complications is still high (21%). This figure increases to more than 35% when including both planned and emergency caesarean sections, this figure is much higher than those recommended by the World Health Organization (WHO) (WHO, 1985).

A positive result from this study revealed a high presence of companionship during delivery, with a significant difference between both health centres; it is important to highlight that this aspect of care had been introduced prior to the publication of the Humanized Clinical Guidelines and incorporated to this model. Although some other variables differed significantly among the two maternities, in general findings demonstrated that there is an overutilisation of obstetrical procedures such as 92.7% of medical induction of labour (artificial rupture of membranes, use of epidural and oxytocin), despite WHO recommendations of no more than 10% (WHO, 1985). The usage of epidural is currently routine. Although there is no evidence that epidural usage increases the rate of adverse effects (Sharma et al., 2004; Bakhamees and Hegazy, 2007; Zhang and Feng, 2012), however, when used in the early stages of labour, women cannot have free movements. Furthermore, almost all pregnant women are continuously lying down, with continuous cardio-fetal monitoring (although there was a significant difference among the health centres) and with a parenteral intravenous solution. These procedures could delay a physiological process (Albers, 1999; Ben Regaya et al., 2010). Results from surveys in different countries of the region show that many interventions, which have been demonstrated to be useless such as routine episiotomy or perineal shaving, are still in fashion, contradicting evidence-based practices; expert consensus in obstetrics and gynaecology suggest specific actions to be taken by Latin American and Caribbean maternal and perinatal caregivers (Belizan et al., 2005).

Today many emotional, social and cultural human dimensions coalesce together to result in quality delivery care, recognising users as a 'subject' not as an 'object', move from paternalism to a responsible autonomy, from medicalisation and technocracy to respect of natural timing of normal delivery (CMPH, 2007a). Many of these dimensions have not been considered within the biomedical model to a sufficient degree. Successful birth models in Latin America have been described in Brazil and Mexico, both share the commonality that are located outside the hospital and within the community however, these are specific experiences and do not represent the reality of the whole country (Davis-Floyd et al., 2009).

Two Chilean studies reveal that for women, their main understanding of well-being in labour is the feeling of being well treated, valued as persons, and receiving a respectful care (Uribe et al., 2008). Findings in our study revealed that only one-third of women felt that sense of well-being strongly. Also one-third rated their sense of well-being as low.

Many studies show that women in labour appreciate sensible midwifery practice (Parratt and Fahy, 2008), with health professionals who are open to listening, honest, delivering physical and emotional support in other words, caring for women´s needs during labour (Homer et al., 2007, 2009; Hunter et al., 2008; Pembroke, 2008). In this study, women participating in the FGDs recognised strong physical support by health professionals with knowledge and expert clinical skills. However, women had a negative perception regarding the treatment received from the staff during labour, women complained that they were not listened to and considered. Similar findings were reported in a study carried out with middle-aged Chilean women, in which they complained about negative attitudes received from caregivers when they required assistance in primary health care (Binfa et al., 2010).

With respect to the perceptions of midwives, the midwifery participants perceived that they have the competences to work on improving the humanisation process of birth; however, they perceive obstacles in the facilities and by medical domination, which contribute to resistance to change. Contrary to the women´s opinions, midwives consider that they treat all women well. In line with this, findings from another Chilean study interviewing midwives, they considered themselves to be the most appropriate health professional addressing midlife women's health needs (Binfa et al., 2011). Similarly, the obstetricians in this study perceive that they have always been involved in giving humanised care to the women. These perceptions indicate that both professionals have neither reflexivity, nor self-critique about their role, and they do not question the ethics of their practice (Homer et al., 2007; Barclay, 2008).

Another significant qualitative finding, as reported by the midwives working in the maternity units, showed that women are not adequately informed and prepared in primary health care, so mothers are unaware of the normal reproductive process. Thus they are not able to

make informed decisions. This is a similar finding within a study showing that in Latin America, a paternalistic health model and a highly hegemonic medical structure are widespread, in which users do not question medical treatments. When a passive relationship is established, the use of inappropriate interventions is not questioned. Involving women in their care is an effective, evidence-based perinatal practice by itself (Belizan et al., 2005). We found Chile is no exception.

Midwifery practice does not exist in isolation of its organisational culture. Chilean midwives are defined as autonomous professionals, yet they reported in this study that they felt that they are not empowered in their role, they do not evaluate medical recommendations, and they simply follow them. Midwifery-led birth centre models have shown to be effective in reducing obstetric intervention rates (Stapleton et al., 2013), including the reduction of caesarean section (Hodnett et al., 2012; Faucher, 2013).

Relevant work conditions for facilitating midwives' empowerment would include a work environment that recognises midwives as autonomous providers and provides them with control, support, recognition, and skills (Matthews et al., 2006).

As noted previously, changes in birth practice requires an effective and cohesive social movement, a deep change that takes a long time to consolidate. In Latin America, this movement towards humanisation of birth includes an ideological change (with a paradigmatic shift), a policy change incorporating humanised protocols and guidelines, and a practice change all aligned with economic incentives and legal and regulatory changes around women's rights (Davis-Floyd, 2007). This study is one contribution to advance this movement for change by showing that only midwives were trained in the theoretical aspects of the model without considering all the rest of the health team, by only implementing the guideline without taking into account all the other relevant aspects is not enough to move toward a real change.

Limitations of the study

This study was carried out in two major hospitals within the National Health System in the Metropolitan Area, Santiago, which in fact does not represent the country as a whole. Therefore, findings of this study cannot be generalised to the rest of the country. Chile is politically and economically organised in 15 regions plus the Metropolitan Region (MR), where Santiago, the capital of Chile is located. Because of its geography, a long and narrow piece of earth, the different regions vary from being in the north, central or southern part of the country. Data collection in the quantitative stage was done while women were still receiving care; however the qualitative interviews were carried-out during the last day before leaving so that women were able to assess the quality of the care they received. Although, the past governments have made strong efforts towards decentralisation, the capital still concentrates most of the resources and population of the country. Thus an important challenge is to identify if there are cultural, ethnic, climatic and or geographical differences among the regions, providing knowledge about midwifery strengths that could be of interest to share in order to improve the implementation of this guide and model of care. Therefore, this research team gratefully received a grant from the National Health Research Funding (FONIS), to replicate this study in seven regions of the country, two located in the north, two in the central zone and three in the southern part of the country, which will allow further research to respond to this limitation (FONIS-SA12I2079).

Conclusions and implications

The results from this study illuminated the main strengths and weakness in the implementation of the 'Chilean Model of Integrated and Humanized Health Services' (CMPH, 2007a), and specifically, the degree of adherence to the Clinical Guide for Humanized Care during Delivery. Such information can be useful to inform strategies for action. More socialisation and education is required for the professional staff, women and health students. Concerning education, students involved in the assistance of women during their reproductive process must engage in a professional training programme that can guarantee attaining clinical competencies in effective communication skills, and promoting women´s empowerment. Involving women in the process of care is important; this must be achieved through systematic education in the reproductive process based on the best scientific available evidence. Improving evidence based practice is good to lower cost and reduces harm. Thus, increasing evidence based practice will contribute to promote maternal and infant health.

Also, the administration of health facilities must be in accordance with the implementation of a humanised model of assistance. Qualitative evaluation, such as satisfaction of the woman and her partner with their reproductive care must also be embedded into the normal operating procedures of health centre practice. Both are necessary if true respect for the woman and her psychological, social, and cultural needs are to be honoured.

Authors' contributions

All the authors of the manuscript actively participated in the conception, design and analysis of the study and in the writing of the manuscript and approved the manuscript as submitted. Last author (Gabriel Cavada) made a significant contribution regarding methodology and data analysis.

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