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Theory of Information Behaviour as a Theoretical Framework for Understanding Non-Compliance to Child Spacing Information: A Fresh Perspective for Designing Child Spacing Information Services and Communication Programs

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ABSTRACT

Background: Non-compliance with child spacing is a major public health problem and a leading cause of maternal mortality. This study aimed to explore the socio-cultural reasons for non-compliance with child spacing information. Using Chatman's (2000) theory of normative behaviour as a theoretical framework to guide the investigation

Method: The study adopted an interpretative research paradigm and also a qualitative research method, guided data collection, data analysis, data interpretation, and discussion of findings. Twenty-five childbearing women were interviewed using a semi-structured interview. The study adopted an analytic inductive process to identify 235 narratives explaining socio-cultural reasons for non-compliance with child spacing information. The narratives are organised into 13 recurring topics and further collapsed into six emergent categories to explain the socio-cultural reasons for non-compliance with child spacing information.

Results: Findings indicated that availability of child spacing information, Beliefs, and practice related to child spacing information, spouse resistance to child spacing information, fear and misinformation relating to child spacing information, suspicion of Western people, distrust in mass media and health care providers are the major findings of this study.

Conclusion: Findings interpreted using Chatman's (2000) theory of normative behaviour conclude that for there to be a sustained acceptance and use of child spacing methods, there is a critical need for child spacing information program, to design child spacing information services based on the social and cultural dynamics of the child-bearing women who are resistance to child spacing information and services. Future research areas for sustained acceptance of the child spacing information services are identified.

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Introduction

Non-compliance with child spacing is a major public health problem and a leading cause of complications during pregnancy and childbirth (Davanzo, 2004). Complications during pregnancy and childbirth are a leading cause of maternal mortality for women in most developing countries. It is estimated that over 21.7 million women experience complications during pregnancy and childbirth each year, worldwide. Of these figures, 10.7 million women die, with approximately 79% of these deaths occurring in Africa (NDHS, 2013). William (2010) lamented that Nigeria accounts for about 41% of all maternal complications. In Kaduna State, it was reported that over 12,944 women die annually due to pregnancy-related complications (KSRHS 2014, NURHI 2015). To reduce maternal complications during pregnancy and childbirth, scholars have approached the problem from a health perspective and recommended the use of child spacing methods (Robert, 2014; William, 2010; Davanzo, 2004). While these studies have greatly contributed to a better understanding of the problem, they are presented in isolation and lack the support of a theoretical framework. Furthermore, little research has directly explored non-compliance to child spacing from socio-cultural perspectives to inform the design of child spacing information and communication programs (Davanzo, 2004). To bridge this gap, there is a compelling need to identify fresh perspectives on child spacing information and communication strategies that are suitable to the contexts and

situations of childbearing women who are chronically resistant to child spacing.

Using the constructionist view of reality and Chatman's (2000) theory of normative behaviour, this study investigates the social and cultural factors responsible for non-compliance with child spacing information among childbearing women in Kaduna state, Nigeria.

Research Questions

This study sought to answer the following research questions:

1. What types of child spacing information is communicated to childbearing women?

2. How does Chatman's (2000) theory of normative behaviour and her perspective on social norms, worldview, social type, and information behaviour explain non-compliance to child spacing information among childbearing women?

Theoretical Framework

The theoretical framework for this study is Chatman's (2000) theory of normative behaviour; it provides a framework for exploring the ways individuals interact with information in the context of social and cultural perspectives of the "small world" setting. Normative behaviour provides four conceptual constructs (social norms, worldview, social types, and information behaviour) that aid in analysing how individuals' everyday worlds shape their information actions.

Social Norms: "Social norms are the standards with which members of a social world comply in order to exhibit desirable expressions of public behaviour" (Burnett, 2009).

Worldview: Worldview is "a collective set of beliefs held by members who live within a small world" (Chatman, 2000).

Social Types: Social types "refer to the ways in which individuals are perceived and defined within the context of their small world" (Burnett, 2008).

Information Behaviour: Information behaviour is defined as "a state in which one may or may not act on available or offered information" (Burnett, 2009)

Several scholars have adopted Chatman's (2000) TNB to study the information behaviour in small-world group settings (Burnett 2008; Burnett 2009; Chatman 2000; Musa 2013)

Literature Review

Non-compliance with information on child spacing is associated with poor health among women and children and reduced quality of life for families (Abubakar, 2015). According to Vathiny and Hourn (2009), gaining control of one's reproductive choices and fertility has health benefits for the mother. In 2003, about 90% of obstetric-related mortality and morbidity could have been averted by the utilization of information on child spacing by women wanting to either postpone or stop having children (Rutstein, 2003).

In some cases, a mother's death is considered to be the death of the household (WHO, 2010). In addition, Agudelo (2004) argued that using child spacing information to reduce maternal-related complications has benefits to the mother and society at large. In some communities, studies indicated that gender roles, lack of trust with the health-care providers, mass media, cultural norms, and behaviour have several implications for the utilisation of child spacing information (WHO, 2010; William, 2009; Mapembeni, 2007).

Utilisation of information on child spacing saves lives and improves the health of women and society as a whole (Bawah, 2002). This is because any social or traditional investment that has been made in a woman who dies of a maternal cause is lost; her family loses her care and productivity in and out of the home (Renne, 2006). Furthermore, maternal death has implications for the whole family and has an impact that rebounds across generations (Orji 2006). The complications that cause the deaths and disabilities of mothers also damage the infants they are carrying (Link, 2011). Studies have shown that the majority of maternal deaths and disabilities can be prevented through the utilisation of information on child spacing (Babalola & Fatusi, 2009; NDHS

2013, WHO 2010). Utilisation of information on child spacing plays a major role in reducing maternal mortality and morbidity (Navaneetham & Dharmalingam, 2000). It also contributes towards the achievement of the Millennium Development Goals (WHO, 2010; Babalola & Fatusi, 2009).

Conversely, utilization of information on child spacing is determined by many factors, ranging from economic, religious, cultural, and political. More so, socially and culturally, many women in developing countries prefer not to use child spacing information due to religious reasons, and it is reported that the use of such information remains low in sub-Saharan Africa (Mapembeni, 2007), including Nigeria (Galadanci et al, 2007). In Sudan, an Islamic country in the developing world, women reported that the use of child spacing was against their religion and cultural beliefs (Abubakar, 2009; Sunusi 2006; WHO, 2007). Religious and cultural resistance to information on child spacing is fed by high illiteracy rates, distrust of foreign influence, perceived religious prohibition against the utilization of information on child spacing, and cultural beliefs that value large families (Sunusi, 2006).

Methods

This study adopted a qualitative research methodology. Qualitative research aims at gathering an in-depth understanding of human behaviour and the reasons that govern such behaviour (Burnett, 2009). It is also a method designed to help researchers understand people within their social and cultural contexts. The purpose of this study is to gain a thorough understanding of the socio-cultural factors responsible for non-compliance with child spacing information among childbearing women in Kaduna State by learning first-hand information from them in their setting.

A total of 25 participants were selected through a purposive technique, particularly criterion sampling. Purposive sampling involves selecting participants who are best able to help the researcher understand the problem and answer the research questions (Musa, 2013). Therefore, participants for this study must meet the following criteria: must be a child-bearing woman aged 20-45, must have a minimum of four children over the last six years, who must have registered and be attending the antenatal clinic at Barau Dikko Teaching Hospital of Kaduna State University (BDTH-KASU). BDTH-KASU was chosen because it provided the researchers with access to childbearing women attending both antenatal and postnatal services, and it also allowed the researchers to gain varied opinions about the issue under study from different social and cultural backgrounds.

The method used to collect data is in-depth interviews. The interview session began with the administration of an informed consent form. The consent form solicited participants' permission to participate in the interview voluntarily, and it sought authorisation to record the conversations. Additionally, respondents were assured of privacy and confidentiality regarding their responses. During the interviews, the researchers used for probing technique to solicit in-depth information and/or to build on their responses. The collected data were transcribed for analysis.

The analysis of interview transcripts was based on an inductive approach through identifying patterns in the data using thematic codes. The process of inductive analysis, according to stages suggested by (Graneheim & Lundman, 2004) and adopted in this study, is as follows.

1. Transcribing the entire interview immediately after completion: The voice-recorded interview was transcribed verbatim manually on plain sheets of paper.
2. Reading the text to gather an overall understanding of its content: To accomplish this task, the researcher read and re-read interview transcripts, searching for similarities and differences in themes by underlining key points (103 open codes) using a pen.
3. Determining meaning units and initial codes: To accomplish this task, the 103 open codes were scrutinized, and related open codes were identified and grouped to form 6 sub-categories.
4. Classifying initial codes into more comprehensive categories: To accomplish

this task, the six sub-categories were condensed into four final categories. The final categories were then narrowed into the three themes of the theory.

Results

Availability of child spacing information

This category pinpoints the various types of child spacing information available and communicated to childbearing women. It is generated from one main sub-category: type of child spacing information. These are explained below:

Type of child spacing information: These comprise information on the following methods: pills, IUDs, implants, injections, and condoms. Of all the methods listed, pills and injections were the most commonly identified. They communicated to them, as revealed by the 8 participants: *"Pills and injections are the most popular types of child spacing information communicated to us in this community through radio, TV, and healthcare providers"*. Other methods, such as IUDs and implants are periodically communicated to them on specific days, as explained by the 10 respondents: *"IUDs and implants were normally communicated to us in this community through radio and TV on Wednesdays and Fridays weekly*…" Participants further said, *"In hospital, all the four methods are communicated to us during health talk at the clinic"*.

Beliefs and Practices Related to Child Spacing Methods

This category provides some explanations and quotes from the participants' responses on beliefs and practices related to child spacing methods. This category is generated from four sub-categories:

Cultural Beliefs that Value Many Children as a Replacement:

Respondents believe that it was unacceptable for their culture to practice child spacing. Therefore, the parents will not be happy with that person, as detailed by the 7 participants: *"When a grandmother or grandfather is dead, his/her name is missed; we want to give the name in our family. Once a female is pregnant and inappropriately bears a child of a different gender than the grandma or grandpa, the elders will still insist that they want the family to bear an additional child until the gender that is required is found"*. Another respondent affirmed that: "*We got married to give birth, and for that, we don't need to rest".*

Cultural Beliefs that Value Many Kids as a Social Status:

Responses from participants revealed that they want more children because social disgraces exist toward childless mothers; having many kids can signify a high social status. Participants believed that a person with many kids would earn additional respect and receive (inherit) more of the partner's wealth, as revealed by the 10 respondents: "*I even want my kids to reach about thirty (30). I want to be the one with the highest number of kids so that they can inherit more of our partner's wealth."* Participants further said, *"Because whoever God has given many children, that person is the wealthiest person in the society".*

Islamic Beliefs that Having or Not Having a Child is from God:

Responses from participants revealed that using information on any form of child spacing methods is forbidden, and it is in contradiction to their religious belief, as claimed by the 10 respondents: *"It is not allowed in our religion by any true Muslim".* The other 15 respondents explained that *for families, we cannot plan.*"

"Under no conditions should a woman use child spacing methods to plan their children. When God wants a mother to rest, then she will plan and rest." In the same vein, these respondents explained that *"morally, I feel that it is not good to use child spacing methods.*

Spouse's Resistance to Child Spacing Methods

It would be immoral for a woman to use child spacing methods without her husband's knowledge or consent, and most of the husbands do not support their wives in using child spacing methods, as revealed by the 17 respondents: *"I do not use child spacing because my husband doesn't like it and we must follow his command*." Participants

further added that *"people in my area (society) are not using it".*

"There was a time I brought the idea of using the child spacing method, and he (husband) refused to support the idea and warned me not to discuss such an issue again."

Anxiety of spouse's reaction to child spacing use

Childbearing mothers seemed anxious about their partner's reaction to the suggestion of child spacing. Participants feared that their partners would feel rejected or unloved if they proposed child spacing use. 5 participants explained the reason why they may not be willing to speak to their partners on the use of child spacing: "*He may probably think that I do not want to sleep with him or that I do not love him*." Three other respondents refer to being scared: "*I am scared of talking to my husband about anything related to child spacing because I am afraid this could cause strife in our relationship."*

Lack of Spousal Communication on Matters Related to Child Spacing Methods

As this question was asked to the participants, it indicated that husbands do not discuss or communicate matters related to child spacing methods with their wives, as revealed by 5 participants: *"I never discuss anything about child spacing with my husband at all because I know he will never allow me".*

"My husband didn't discuss issues related to child spacing methods with me… maybe we don't know about the benefit of spacing children." "I never discuss child spacing methods with my husband because I never think of using them at all; maybe we don't know the advantages of them".

Anxiety of promoting promiscuity:

In the course of trying to find out whether the childbearing mothers communicate child spacing methods with their partners, 11 participants went on by saying, *"Kasan (you know), it encourages most women to have affairs outside marriage"* Another participant further explained that, *"My partner refused to take child spacing due to promiscuity, (having affairs with other men outside)"*.

Fears and misinformation related to child spacing methods

This category provides some explanations and quotes from the participants' responses on the fear and misinformation attached to each type of child spacing method. It is generated from two main sub-categories: fear of infertility and fear of side effects, as detailed by the 6 participants:

"The pills are not good, and even my mum warned me severally not to use pills because it will stop women from giving birth at all. Another participant said, *"you can never get pregnant if you use injection. Participants further added that: "My sister said you might never give birth if you use the injection".*

Fear of Infertility about the child spacing methods:

This category was revealed by the 9 participants as the possible consequences of most child spacing methods; it was strongly voiced around three types of child spacing methods, which include injectable, pills, and intrauterine device (IUD).

"Child spacing methods is a device to stop births". Similarly, another 1 participant explained, *"If you want to stop giving birth forever, you can use an intrauterine device, which is not acceptable with our social norms and values."* The participant further said… *"My mother-in-law told me if I use an injection it will make me sick and cause severe bleeding that can lead to death".* Similarly, the intrauterine device (IUD) expressed by participants 7 that*, "It could shift during sexual intercourse, with serious implications for birth outcomes".*

Fear of side effects about the child spacing methods:

Participants expressed apprehensions about child spacing use and perceived it as foreign objects that could disrupt the natural processes of the body and create harm, as interpreted by these 5 participants: *"I heard of women who got pregnant after using the injection, and she had some difficulties during giving birth, difficulties such as headaches and high blood pressure. As a result of this obstacle, she had*

to go to the hospital and undergo an operation." Another 3 participants refer to their beliefs about child spacing use: *"We heard and believed that taking the pill causes bad side effects such as fever, stomach aches, weight changes, and failure to menstruate regularly".*

Suspicion of Western people

This category provides some narratives related to the mission of Western nations in promoting the use of child spacing. It is generated from one main sub-category, Western conspiracy. These are explained below:

Western conspiracy: This sub-category comprised explanations of allegations by childbearing women that the mission of promoting the use of child spacing is part of a Western strategy to depopulate Muslims through child spacing methods. These are their stories in their own words: *"Really, our elders and religious teachers in our community are doubtful about using child spacing because it came from the Western people*." 13 participants detailed *that "I could remember our Islamiya teacher (religious teacher) told us when child spacing devices were first introduced, his Islamic teachers strongly opposed it and warned them against its use, the same he (Islamic teacher) told us not to use any child spacing methods; it's a Western means of reducing the Muslim Ummah (Muslim people)"*. Another 1 participant said, *"They do not like Muslims".* Suspicion of Western people leads to distrust in mass media and health care providers.

Distrust in mass media and health care providers in disseminating and promoting child spacing information

This category provides some explanations for the perceptions and understandings of childbearing women toward the child spacing information disseminated to them through mass media and health care providers. These are explained below:

Mistrust of mass media toward technique used in disseminating child spacing information: Data from this study indicated the actions of childbearing women when they saw or heard any child spacing information through television and radio, as revealed by the 15 participants "*The way television broadcast the information on child spacing is not proper and unreliable. Sometimes I used to turn off my television because I did not like it. If you see how to insert an IUD in a woman's body, it is not good at all. It is unbelievable; this is just American propaganda to reduce the population of the Muslim Ummah. But with God, that will never happen"*. 6 Other participants explained that *"Sometime during news hour, they used to advertise child spacing methods, most especially on how to use condoms. We don't like it; at times we used to change channels because we were watching with our children, and if our children know or are accustomed to how to use condoms, they may probably use it and have sex with other people outside."*

In the same vein, 11 participants explained their perception toward promoting child spacing through radio. *"Sometimes dramas are aired on the radio (Nagarta) to enlighten people on this issue (child spacing), but if you listen to the drama wisely, you will not even believe what they said, because they are not putting it properly; sometimes I used to turn off my radio if I hear anything related to child spacing since they do not want us to have a lot of children".*

Suspicion of health care providers toward the technique used in communicating child spacing information: This category explained perceptions from five participants who learned about child spacing information during health talk at antenatal care visits and immunisations when they brought their babies in for a check-up at the clinic: *"I learned the information during health talk at the clinic. Most of the workers do e not open their mouths to talk loudly, so you hardly hear what they are saying, and as such you cannot understand.,"* Other participants explained: *"I don't like the way these people (health care providers) communicated with us, because they are talking to us in public instead of talking to us individually. "Kasan" (you know) is a private issue…. The participant said I do not trust them".*

Discussion of Findings

This section discusses the research findings under the major category that emerged, including

pertinent quotes from the participants. The findings were arranged in line with the research question asked in the study in a convincing manner in order to achieve the stated objectives of the study.

Broadly speaking, findings from this study indicated that most of the child-bearing women interviewed are aware of the child spacing information communicated to them and how to use it, but due to religious and cultural norms that promote large families and, in some cases, forbid the use of child spacing information. Not surprisingly, of all the methods listed, only pills, condoms, and injections were the most commonly identified methods and popular, which is the only type of child spacing information communicated to them frequently through radio and television. Other methods, like IUDs and implants, are the types of child spacing information communicated to childbearing women periodically on specific days, normally weekly, between Wednesday and Friday. The finding also indicated that pills, condoms, implants, and injections were always available and communicated to childbearing women during health talks at antenatal care visits.

Social norms are the standards with which members of a social world comply to exhibit desirable expressions of public behaviour" (Burnett, Besant, & Chatman, 2001). The findings in this study indicated that childbearing women lived within a highly pro-natal community and attached many positive values to large families and procreation, which were deeply rooted in their social norms. Childbearing women have created the social norms and standards that a person must adhere to live. It is also part of their social norms to obey and seek permission from their partners for everything they want to do.

Conscientiously, childbearing women believed that in their religion, having a child is only from God. As such, it is obvious that it is these social norms and adherence to childbearing women that sustain their living. This confirms Chatman's (2000) assertion that the prominent role of the social norms is to hold the small world together.

Worldview is "a collective set of beliefs held by members who live within a small world" (Chatman, 1999). She further mentions that a worldview provides a sense of belonging and allows members to adopt a community approach to activities and events in their small world. Findings from this study revealed that child-bearing women have a worldview deep-rooted in the shared understanding and believe that child spacing methods are a foreign method that could disrupt the normal processes of the body. The understandings of the child-bearing women about child spacing methods inform their worldview, and they perceive information on child spacing as irrelevant to their need for everyday life information-seeking behaviour. Chatman (1999) contended that members of a given small world would cross information boundaries only if "there is a collective expectation that the information is relevant".

Social types "refers to how individuals are perceived and defined within the context of their small world". The process of social typing, according to Burnett and Jaeger (2008), occurs both within the boundaries of the small world and the society at large. They also suggest that the most important members of the small world are the insiders. Based on these explanations, the two main groups of social types identified in the study are insiders and outsiders. The insiders are the child-bearing women, Islamiya teachers (religious teachers), parents, and partners. The outsiders include mass media (agencies) and healthcare providers. The Chatman theory of normative suggests that members in a small world would readily accept and disseminate information from a social type whose behaviour and connections or interactions within the small world are desirable (that is, they conform to the worldview and norms within their world). As Chatman (1999) explained, the role of social types, i.e., that "most of us tend to reveal and exchange information among peers of our own type".

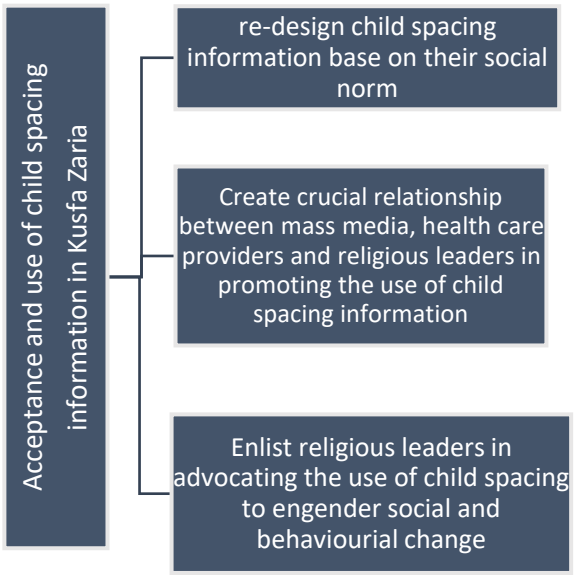
Findings from this study indicated that discussion occurred among husbands, parents, relatives, and religious teachers through information sharing with members of their small world. Findings in this study revealed instances in which religious teachers share

information through sermons, detailing the dangers of accepting child spacing methods and condemning the polio vaccine and linking it to child spacing methods of the West to reduce the population of black or Islamic people (Musa, 2015).

Conclusion and Recommendation

Based on the findings of the study, it could be concluded that childbearing women are living within Chatman's (2000) concept of a small world context. Small worlds are social environments where individuals live and work, bound together by shared interests and expectations, information needs, and behaviours. They also suggest that the most important members of the small world are the insiders. Based on these explanations, childbearing women lived within a highly pro-natal context, and many perceived the influential people in their lives and attached many positive values to large families, which were deeply rooted in socio-cultural practices and religious beliefs.

Figure 1: Examples of Topics for Acceptance and Use of Child Spacing Information



Therefore, Figure 1. Explained the topic for acceptance and recommended that for there to be a sustained acceptance and use of child spacing methods, there is a critical need for a child spacing information program, to design child spacing information services based on the social and cultural dynamics of the child-bearing women who are resistance to child spacing information and services.

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