



## **Information Behavior of Maternal and Child among of Pregnancy and Motherhood with Pre School Children**

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### **Abstract**

The study is survey research which aims to study information behavior on mother and child in terms of information search behaviors, types of needs information, needs information content, and needs on receiving information services from hospitals or other health organizations. The online survey was brought to collect data and 311 surveys were returned which is 77.75 percent of the target number. The data was analyzed into frequency and percentage. The findings from the online survey was as follows; online information platforms as website, Instagram, YouTube or Twitter were the most needed; website about mother and child was the most needed as 81.35percent; needed content were child development and child development enhancement as 73.63 percent; needs on information services from hospital or health centers was monthly newsletter about mother and child as 79.10 percent.

**Keywords:** Information behavior, Maternal and Child, Pregnancy Mothers



### บทคัดย่อ

การวิจัยนี้ เป็นงานวิจัยเชิงสำรวจ (Survey Research) มีวัตถุประสงค์เพื่อศึกษาพฤติกรรมสารสนเทศเกี่ยวกับแม่และเด็กของสตรีมีครรภ์ และมารดาที่มีบุตรอายุไม่เกิน 4 ขวบ ในประเด็นพฤติกรรมการค้นหาแหล่งสารสนเทศ ประเภททรัพยากรสารสนเทศที่ต้องการ เนื้อหาสารสนเทศที่ต้องการ และความต้องการได้รับการสารสนเทศจากโรงพยาบาลหรือหน่วยงานที่เกี่ยวข้อง กลุ่มตัวอย่างจำนวน 400 คน เป็นมารดาที่กำลังตั้งครรภ์ระหว่างเดือนพฤษภาคม – มิถุนายน 2562 หรือมารดาที่มีบุตรอายุไม่เกิน 4 ขวบ (ภายในเดือนมิถุนายน 2562) เก็บรวบรวมข้อมูลโดยการเผยแพร่แบบสอบถามออนไลน์ผ่านเครือข่ายสังคมออนไลน์ ได้รับการตอบกลับจำนวน 311 คน คิดเป็นร้อยละ 77.75 ของจำนวนกลุ่มตัวอย่างที่กำหนดไว้ จากนั้นทำการวิเคราะห์ข้อมูล หาจำนวนและค่าร้อยละ ผลการศึกษาพบว่าพฤติกรรมสารสนเทศเกี่ยวกับแม่และเด็กของมารดาที่มีบุตรอายุไม่เกิน 4 ขวบ แหล่งสารสนเทศที่ผู้ตอบแบบสอบถามเลือกใช้มากที่สุดคือ แหล่งสารสนเทศประเภทอินเทอร์เน็ต เช่น Website Instagram YouTube หรือ Twitter ร้อยละ 81.35 ประเภททรัพยากรสารสนเทศที่เป็นที่ต้องการมากที่สุดคือ เว็บไซต์ที่เกี่ยวข้องกับสุขภาพแม่และเด็ก ร้อยละ 73.63 เนื้อหาที่ผู้ตอบแบบสอบถามต้องการมากที่สุดคือ พัฒนาการของเด็ก และการส่งเสริมพัฒนาการของเด็ก ความต้องการได้รับการสารสนเทศจากโรงพยาบาลหรือหน่วยงานที่เกี่ยวข้องมากที่สุดคือ จดหมายข่าวแจ้งพัฒนาการแม่/เด็ก เป็นประจำทุกเดือน ร้อยละ 79.10



## 1. Introduction

Thailand has encountered crises on birthrate downturn and infant and mother health issues tremendously. The Office of the National Economic and Social Development Board (ONESD) estimates that by 2040 the births slightly will be declining to 500,000 infants. The Department of Health found that in 2015 there was 7 percent of the death rate on congenital diseases, 10.4 percent of premature birth, 10.4 percent of low birth weight baby, 18.2 percent of complications baby after birth. Moreover, it was found that Early childhood had 27.3 percent on delayed development, 16.3 percent on malnutrition, 8.2 percent on dwarfism, 35.3 percent on hormonal imbalance. Besides, those 3- and 5-year-old children had deciduous teeth cavity for 52.3 and 78.5 percent respectively and permanent teeth cavity was found for 52.3 percent (Reproductive Health Office Department of Health Ministry of Public Health, 2017) According to the survey on children and women in Thailand by the National Statistical Office and United Nations Children's Fund in 2016, it showed that 40 percent of Thai babies have breastfeed after one-hour birth whereas only 23 percent of Thai babies have 6 month-breastfeeding and 2 year-breastfeeding respectively. This might not correspond to the World Health Organization (WHO)'s guideline as infants should have breastfeeding after one-hour birth, 6-month breastfeeding, and 2-year breastfeeding with regular food (Thaipost, 2018).

In terms of mothers' health issues, in 2014 the Ministry of Public Health reports that women who are in working group and aged between 20-34 encountered the downturn of fertility rate the most. Further, in 2015, Department of Health found that obstetrical hemorrhage is the cause of death as reproductive female aged around 15 has anemia for 29.8 percent, pregnant women has Iron deficiency anemia for 39 percent (Reproductive Health Office Department of Health Ministry of Public Health, 2017) Miscarriage and abortion is also found as WHO estimates that every year there will be 46 million women having termination of pregnancy but approximately 20 million women had done it unsafe and 70,000 mothers died from unsafe abortion, additionally, 95 percent of unsafe abortion was in Thailand (Fund Adolescent Pregnancy Counseling Project 1663 and Office of Health Promotion 2018).

Consequently, to promote health literacy on reproductive females, mothers, or expecting women it is crucial to have those women understand about their health and healthcare services also be capable on taking care themselves and others effectively and skillfully (Health Education Division, Department of Health Service Support, 2016). The health literacy often comes with information behavior which is the behavior on data search related to their needs and apply the data usefully (Wilson, 1999). This research focuses on information behavior that mothers often need as information sources, contents, and information needs from hospitals or related organizations. The behavior is important to the research target group as if the targets realize their needs regarding information sources, platforms, and applications, it will reduce the aforementioned issues also lead to additional guidelines on mother and child's health promotion.



In accordance with the study on motivation and information behavior of mothers' health literacy, Tanarat Charoen. (2001) reports that 400 pregnant mothers in Bangkok area often access the information from related personnel as obstetricians, nurses, and experienced mothers. The pregnant mothers mostly got some information from doctors and the primary content was symptoms and discomforts of pregnancy and the secondary information was preparation, feeding, and parenting.

Due to technology advancement and recent information behaviors that users often rely on online information, the researchers would like to study changes and needs of information behavior regarding mother and child and motherhood of pre-school children.

## 2. Method

**Research Objectives:** To study information behavior of mothers concerning information seeking, information source, content, and needs on information services from hospital or health centers

This study employs survey research method as using online questionnaire to collect the health literacy data from pregnant mothers and/or mothers of pre-school children between May – June 2019 as follows:

1. Population of this research is pregnant mothers and/or mothers of pre-school children. Office of the National Economic and Social Development Council (2018) shows reproductive female rate per 1,000 women between 2002 – 2017 regarding age rank as there were 12,025,817 reproductive females aged between 15-59 who were in Thailand. The researchers applied Yamane formula to determine a sample size based on 5% of margin error and 95% of confidence level and the sample size was 400 people. The online questionnaire was distributed, and 311 pieces or 77.75 percent were returned.

2. The research tool was online questionnaire regarding mother and child information behavior of pregnant mothers and mothers of pre-school children. The researchers developed the questionnaire based on information behavior theories and related research, moreover, the questionnaire was approved by the research advisors.

3. To collect data the researchers distributed the questionnaire through social network as mother and child Facebook Fan pages approving by the page administrators and through Twitter between 15<sup>th</sup> May to 15<sup>th</sup> June 2019. To search for distribution channel the researchers searched for Facebook pages or groups about mother and child by keywords as mother and child, mother, pregnancy, new mom, parenting, raising baby, baby, or infant. Then the researchers selected the target pages or groups based on followers and member screening process. The selected social network is as follows: 'Pregnancies Talk' which is public group with 488,252 members (Pregnant people talk, 2014), and sponsored by theAsianparent website (TheasianparentThailand, 2009), 'New mommy club' which is closed group with 115,107 members (Club of new mothers, 2016). 'HerKid' which is public group with 669,984 members (HerKid Gathering, 2014). 'Mothers-Kids and medical guides only' which is closed group with 54,827 members (Mother-Child According to medical principles only, 2016) Taking kids with us' page by M. D. Dr. Jiraphorn Aroonakun with 598,961 followers (Raising children outdoors, 2015), and 'Rakluke Club' page with 883,407 followers. The questionnaire was distributed and reposted every 5 days. It was forwarded to friends, relatives, acquaintances, and friends of friends who are pregnant and are a mother of pre-school children purposively.



4. To analyze data the researchers checked completion of 311 questionnaires and analyze them by frequency and percentage.

### 3. Results

1. General information of key informants is as follows: all of them are female, 179 females aged between 31-40 (57.56 percent), 269 females are married (86.50 percent), 157 females are in expanded family (50.48 percent), 152 females are in nuclear family (48.87 percent), 182 females had bachelor degree (58.52 percent), 96 females own a business or are freelance (30.87 percent), 84 females had average income on 10,001 – 30,000 baht (27.01 percent), 83 females had average income on 30,001 – 50,000 baht (26.69 percent), and 285 females are mother of pre-school children (91.64 percent).

2. Information behavior on motherhood of pre-school children consists of selected health information, needed information source, needed content, and needed health information from hospitals or health centers is as follows:

2.1 health information on mother and child source which most chosen was online source such as website, Instagram, YouTube, or Twitter for 253 votes or 81.35 percent whereas media was chosen the least as TV programs or radio also institutes as library, mother and child centers, child clinics, family planning centers for 61 votes and 60 votes for 19.61 and 19.29 percent respectively.

2.2 Information source which was the most needed was mother and child health websites for 299 votes or 73.63 percent, website, Instagram, YouTube, or Twitter for 212 votes or 68.17 percent, yet the least needed source was TV or radio program for 35 votes or 11.25 percent.

2.3 Contents which is ordered according to the most needed to the least are child development, child development support, baby nutrition, children diseases, vaccination, health care during pregnancy, mother nutrition, exercise based on each period of pregnancy, pre caution symptoms, preparation, delivery package for pregnancy and hospitals for pregnancy. According to the results, it was found that content about raising children to have good health and development, and content on taking care oneself during pregnant.

2.4 The needs on healthcare services from hospitals or healthcare centers shows that 246 votes or 79.10 percent were for newsletter on reporting mother and children development, in contrast, 69 votes prefer follow-up on healthcare.

### 4. Discussion

Health information on mother and child source which most chosen was online source such as website, Instagram, YouTube, or Twitter and applications is the second preference and it relates to survey results on Thailand Internet User Profile in 2018 which retrieved from Electronic Transactions Development Agency (Public Organization) or ETDA shows that from 10,730 informants people aged less than 18 years old (Gen Z) spend most time online, then people aged between 18-37 (Gen Y), people aged between 38-53 (Gen X), and people aged 54-72 (Baby Boomer) respectively.



There was a maximum time spent on the internet as 10 hours and 5 minutes per day. Social media was the most spent as 93.6 percent, yet TV or radio programs was the least chosen. Further, it was found that in 2017 people who watch TV aged 35 or more. They watched TV for 4.12 per day. The research results are corresponded to technology advancement as it is easy to access, consequently, they rely on internet rather than watching TV or listening to news and reading.

Besides, it was found that information behavior relates to mother and child shows relationships with education status as mothers have low education tended to have low behavior on taking care themselves also lack skills on discuss issues with doctor and this put mother and child health in a risk. In contrast, mothers who are well-educated tended to have ability to take care themselves and have better discussion skills. It could lead to better health conditions of mother and child. In terms of needs on services, it shows that staff needs to provide information on mother and child healthcare, for example, taking care of mothers' health in every pregnancy stage, baby nutrition, parenting also staff needs to possess answering skill, service mind, and can-do attitude on helping mothers to have good health and safe delivery.

## 5. Suggestions

1. Website, Instagram, YouTube, or Twitter are information source which the key informants chose so that hospitals, healthcare centers, or mother and child clinics should provide online information regarding mother and child as child development, child development support, children development enhancement, baby nutrition, children diseases, vaccination, health care during pregnancy, mother nutrition, exercise based on each period of pregnancy, pre caution symptoms, preparation, delivery package for pregnancy and hospitals for pregnancy. The information should be updated, precise, concise, easy to understand as in infographic or short articles with meaningful illustrations.

Institute information as library, mother and child centers, child clinic, and family planning centers were the least chosen, therefore, it should be promoted as arranging long-term activities.

2. According to the results on service needs from hospitals or healthcare centers, the key informants needed newsletter on child development monthly the most, yet following-up on healthcare was the least needed so that hospitals or healthcare centers should provide useful newsletter for pregnant mothers or mothers continuously regarding the effective healthcare.





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