

NEGOTIATING RISK: WOMEN RESPONSES TO INFANT FEEDING ISSUES IN THE MALAYSIAN MEDIA

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Abstract

This paper explores Malay women's responses to infant feeding issues in the media. It discusses three main events which are: (a) Melamine contamination in formula milk in China, (b) The risks of using Bisphenol-A baby bottles, and (c) Toxins in breast milk controversy. The paper seeks to understand the different ways women negotiate these infant feeding risks through their understanding of news/press reports while taking into consideration their own infant feeding experiences. It suggests that the media can influence people's perception of risk. However, this often depends on the magnitude of risk portrayed by the media and mothers' own understanding through personal experiences with breast/formula feeding.

Keywords: *Understanding risk; infant feeding; breastfeeding; melamine contamination; BPA bottles*

RUNDINGAN RISIKO: REAKSI WANITA TERHADAP PEMAPARAN MEDIA MALAYSIA TENTANG ISU/KRISIS PENYUSUAN BAYI DAN KANAK-KANAK

Abstrak

Kertas ini membincangkan reaksi wanita terhadap isu penyusuan bayi di media. Secara spesifik, ia melihat kepada tiga kes iaitu: (a) Pencemaran melamin dalam susu formula (b) Risiko penggunaan botol BPA, dan (c) Pencemaran toksin dalam susu ibu. Makalah ini ingin memahami rundingan risiko terhadap penyusuan bayi menerusi pemahaman mereka terhadap berita dan laporan isu-isu tersebut dalam surat khabar. Dalam masa yang sama, kajian ini juga menitikberatkan pengalaman penyusuan bayi dan bagaimana ia mempengaruhi ibu-ibu dalam pemahaman ketiga-tiga isu ini. Kajian ini mencadangkan bahawa media mempunyai peranan untuk mempengaruhi pemahaman risiko namun ia bergantung kepada magnitud risiko yang diberitakan. Rundingan risiko juga berkait dengan pengalaman ibu dalam penyusuan badan/formula.

Kata Kunci: *Komunikasi risiko; media dan kesihatan; penyusuan badan / bayi; krisis pencemaran melamin; botol BPA*

Introduction

There is some evidence that the media can affect people's perceptions of health (see for example Ramirez et al., 1999; Rogers, et al., 1999) and risk (Morton and Duck 2001). These scholars also suggested that the media may contribute to public understanding of their own health and assist them in health decision making in the broader context. Bridges (2010:60) also concurred that the media play an important role in influencing people's decisions through health promotion messages. The media carry certain agendas in their health reporting which are able to influence public opinions and stimulate people to think about their decisions and why they are crucial (Westwood and Westwood, 1999). The media are also argued to influence people's knowledge and attitudes on health, as well as promoting health consciousness attitude to people (Hotham, 1995). Hotham's survey on people's perceptions of popular magazines in Australia suggested that the media are influential sources of information about health and lifestyle. This 'health consciousness' attitude as Hotham argued, can later result to behavioural and social change.

Previous study (Mohamad, 2007) has highlighted that communications strategies and support to promote breastfeeding in Malaysia are still in its infant stages. The study which was conducted through focus groups with breastfeeding women found that awareness and campaigns to support breastfeeding failed to reach general audience. This has among others made normalising breastfeeding in public a challenge. Significantly, many mothers in the focus groups expressed their feelings of embarrassment when breastfeeding and pumping in public spaces.

At the same time, society sees mothers as being responsible for their family's health decisions and outcomes. As Kukla, (2006) explained:

“In our social discourse, we tend to treat ‘maternal choices’ as though they were morally and casually self-contained units of influence with primary control over children’s health,” (pp.157).

This is in addition to other gender-biased treatment in Malaysia such as dealing with the demands of “patriarchal structures, [and the need to] be sensitive to ethno-religious-cultural believes and practices because gender inequality cuts across race, religion, class lines,” (Wang, 2007). Mat Jamial (2006) who studied a comparison of portrayals of men and women in a local reality TV Explorace found that Malaysian women are often depicted as vulnerable sex objects, emotional and problematic compared to men who are shown as serious, tough, mentally-strong and sexually aggressive. She suggested that there is definitely a need of a deep understanding of patriarchal ideology in the context of Malaysia and Muslim society in order to challenge these social expectations.

However, it is also important to think carefully about these maternal duties and mothers’ responsibilities for their children’s health outcome. Indeed mothers are not independent individual agents therefore, making choices are not straightforward and self-contained, but involves deeper associations with moral accountability (Kukla, 2006, pp.177) and social pressures.

This paper therefore seeks to understand how people interpret risk associated to infant feeding in the media and negotiate their own knowledge and experiences in this process. It does this by talking to mothers in focus groups to understand the different ways media have influence their understanding of infant feeding risks whilst taking into consideration their identity and social responsibility as mothers.

Literatures on audience reception of infant feeding in the media

There is a general assumption that the media can influence people’s perceptions of breastfeeding. However, Foss and Southwell (2006) suggested that in order to analyse media effects, researchers should examine

“Beyond the confines of a single, carefully-planned campaign evaluation... instead look at the impact of an array of media content on health beliefs and behaviour.” (pp.1)

Their research which examined US popular parenting magazine (Parents' Magazine) in a span of three decades demonstrated a negative statistical correlation between frequency of 'hand feeding' advertisements (which refers to breast milk substitutes such as formula milk, cereal, and feeding equipment) and breastfeeding rates. This means that when the number of 'hand feeding' advertisements increases, the number of breastfeeding women drops. They go on to suggest that this evidence

“may help explain why historically, breastfeeding rates were higher in some decades than others, despite similar external forces that should have positively affected breastfeeding.” (pp.6)

They also argued that advertisements may have influenced breastfeeding trend and have some impacts on the decline in breastfeeding numbers especially towards the end of the 20th century.

“Such advertising may have strengthened and perpetuated ideologies against breastfeeding, which may explain why breastfeeding rates fluctuated even when many of the previously documented reinforcing factors remained the same.” (pp.7)

However, their study also pointed out that despite statistical evidence, there is no way to prove how the advertisements can have any causal relationship with breastfeeding rates. Indeed, frequency alone is inadequate to prove any link to changes in human behaviours especially when the relationship between mothers and these advertisements was not investigated.

In another study, Potter et al. (2000) argued that the media, through different discourses are able to reinforce human behaviour. Their study analysed the contents of Canadian women magazines and suggested that the ways the media describe certain infant feeding behaviours and relay “information about the consequences of [such] behaviour” is fostered through media messages (pp.202). However, this study cannot suggest the influence of media on behaviour but findings from this study may reflect societal values.

Arora et al. (2000) revealed that 90 percent of mothers in their study reported that their decisions to breastfeed are influenced by books, magazines and television. Another study by Robinson and Thomson (1989) revealed that parents include newspapers, magazines, television and books as sources of knowledge about breastfeeding. They went on to suggest that knowledge about breastfeeding, along with attitudes, role models and embarrassment, are some leading factors influencing parents' decision to breastfeed or not.

Trust and Farrar in 2008 examined people's attitude towards breastfeeding after showing them an American reality based TV programme *Bring Home Baby*. The study revealed that participants who were breastfed respond positively towards breastfeeding shown in the programme (pp.22) and public breastfeeding in general. The study also found out that participants who are commonly exposed to formula feeding in the media are less comfortable with

public breastfeeding. The study went on to argue that

“If participants constantly view images of bottle-feeding as the norm, which are socially rewarded, then they may fail to foster positive breastfeeding attitudes, especially attitudes toward modelling this behaviour in the public space” (pp.25).

In a different study, Henderson et al. (2011) found that people sometimes negotiated media reports in their understanding of infant feeding. For example, a focus group respondent mentioned a media report on mastitis (bacterial infection to the breasts as a result of blocked milk ducts) in his overall opinion as to why formula feeding was seen as a better choice. In a different example, the study demonstrated how a man attributed to media stories in his understanding of ‘transmission’ of illness (such as cancer) and drugs through breast milk.

Overall, there is much room to explore about people’s responses to portrayals risk in breastfeeding and formula feeding. Kitzinger and Kitzinger (2001) noted that there is a need for more research exploring the prevalence and the effects of breastfeeding images in the media.

Method

This paper examines Malay women’s responses to three issues of infant feeding (i.e. Melamine contamination in formula milk, risk of BPA-bottles and Toxin in breast milk issue). These responses were collected through nine focus groups held in six different states in peninsular Malaysia in between the month of May and July 2009. These responses were generated through headlines prompts and open discussions about infant feeding in focus groups. Although prompts were used in this study, responses generated by mothers were valid responses as they described their own personal actions and understanding towards infant feeding risks.¹

Each discussion began with what participants can recall about the issues and later they spontaneously talked about the issues or instigate other discussions of related health risks issues. These three issues first emerged in the Malaysian media in 2008. The overall examination in this paper represents (but is not limited to) fragments of these three specific events in media reports.

1 It is interesting to note that *two* of the selected issues directly concerned either breastfeeding mothers (Toxins in breast milk) or formula feeding mothers (Melamine contamination in formula milk in China). The third issue (Risk of using Bisphenol-A baby bottles) however, concerned both breastfeeding and formula feeding mothers.

Below are the news headlines used in this media prompt exercise:

Newspaper Headlines	Source	
“Melamine in mothers’ milk. More formula milk companies suspend production”	<i>Utusan Malaysia</i> September 2008	18
“Consumer Association of Penang Urge Ban on BPA baby bottles”	<i>Utusan Malaysia</i> 2008	14 June
“What’s in our drinking water: Toxins in mothers’ milk”	<i>The New Straits Times</i> 2008	11 May

Table 4.1:
Headline prompts used in the focus groups

Below is the distribution of focus group respondents and some background of the groups

Focus Group	Location	Social / Occupational Background	Name, age and current infant feeding choice			Total participants
Focus Group 1	Selangor (City)	Young Professionals with Bachelor degree Qualification	Qaseh	29	BF	4
			Rania	29	BF	
			Hannah	29	BF	
			Mila	29	FF	
Focus Group 2	Johor (City)	Working class family – Stay at home moms and working mothers with High School / College Qualification	Mimi	38	BF	5
			Julita	39	FF	
			Dina	34	BF	
			Zaqyah	34	NF	
			Lana	33	FF	
Focus Group 3	Selangor (City)	Young professionals working at a local university	Lina	29	MF	4
			Sarah	29	FF	
			Zahra	37	BF	
			Joyah	29	FF	
Focus Group 4	Perak (Town)	Young administrative staff working at a teacher’s college	Nani	29	FF	4
			Cinta	30	BF	
			Damia	31	BF	
			Acha	26	BF	
Focus Group 5	Pahang (Town)	Working class family. Stay at home moms and working moms, some with university degree qualifications	Khayra	33	MF	6
			Kimie	29	FF	
			Bedah	29	FF	
			Layla	24	FF	
			Marissa	29	FF	
			Yasmin	33	FF	

Focus Group 6	Perak (Rural)	Working moms at two local university state branches. All with University degree qualifications	Naema	35	FF	4
			Aminah	29	BF	
			Verra	29	MF	
			Damia	31	MF	
Focus Group 7	Kuala Lumpur (City)	Working moms with university degree qualifications	Rabiah	29	MF	3
			Iza	29	FF	
			Maria	29	BF	
Focus Group 8	Selangor (City)	Working Class Family – Stay at home moms/ teachers/working moms, some with university degree qualification	Sofea	40	FF	6
			Latifah	28	FF	
			Heidi	27	FF	
			Lola	41	FF	
			Tina	37	BF	
			Orked	34	NF	
Focus Group 9	Kelantan (Rural)	Stay at home moms with low income family	Mas	24	MF	4
			Yusra	38	MF	
			Bunga	24	MF	
			Fatima	39	MF	

Findings

In this discussion I will explore mothers' responses to each of the infant feeding issues to observe the negotiations and processes of understanding infant feeding risks.

a) Mothers and melamine in the media

In late 2008, six babies died and more than 51,000 infants and young children were hospitalised for a variety of health complications, such as urinary problems, possible renal tube blockages and possible kidney stones. All of these complications were linked to the consumption of melamine-contaminated formula milk and dairy goods (WHO, 2008). Although the melamine contamination was also found in other food products such as biscuits, candies and coffee drink, the worst health effects from this contamination was seen on infants and young children (WHO, 2008). Melamine is a chemical compound used for example, in industrial production of glues, laminates, dinnerware and adhesives. Melamine was also added in formula milk to inflate the apparent protein content, albeit mostly done in order to meet quality standards tests.

The Malaysian government had initiated random selection of melamine tests in products originated from China, or products that were manufactured using Chinese ingredients. A number of formula milk brands imported from China, alongside other dairy-based products that were marketed throughout the country were included in this test. The Malaysian government also informed the public about test results and updated the results through the media and The Ministry of Health's website.

Overall, melamine contamination in formula milk seemed to affect most mothers in the focus groups particularly those who have children under the age of six. In Malaysia, it is common for children to continue formula feeding after weaning from the breasts, up till they reached five years old, or for some, until they reached schooling age (seven years old). This is different from the common practice in the European countries where children are introduced to cow's milk after reaching one year old (if they have stopped breastfeeding). Significantly, even when mothers have successfully breastfed exclusively till the age of two, they would still introduce formula milk to their children, as follow-on milk. Zahra, an exclusive breastfeeding mother was one of them. When asked about the melamine contamination crisis she said,

“I wasn't worried for the little one since he was breastfeeding exclusively. I think he is safe. But I was worried for my elder daughter. I had to check whether her formula milk was safe.”

(Zahra, 37, BF, Focus Group 3, City)

Most research participants understood the risk of melamine towards babies. However, some also believed that melamine was an important basic substance in formula milk. In one focus group participants discussed this:

Hannah (29, BF): I wonder if they really need to add melamine in the first place. Is it a required substance in formula milk?

Mila (29, FF): I think so. But they only need a little.

Rania (29, BF): Yes, it is supposed to be there, but they put in too much.

Qaseh (29, BF): Melamine helps stretch formula milk's shelf life. It is used to prolong the expiry date I think.

(Focus Group 1, City)

Similar opinion was expressed in other focus groups as well. One research participant for example, compared melamine to protein, “I think melamine is required in formula milk. It adds to the protein content. When there is too much they become dangerous,”

(Sarah, 29, FF, Focus Group 3, City).

It is interesting to note that although there are mothers in the focus groups who acknowledged the use of melamine to boost protein content, none of them mentioned about formula milk companies' manipulation to spike protein readings for the purpose of passing quality control tests. This was however, reported in the media – it did not, however, seem to have been understood or recalled by the focus group participants.

China as source of contamination

China was mentioned as the primary source of contamination in all focus groups and in both online groups. Mothers discussed for example, how melamine-contaminated products from China were responsible for babies' deaths and illnesses. Although there were different degrees of concerns about the consumption of dairy-based products, especially with formula milk, mothers were convinced that the contamination was successfully contained and limited to products from China. One research participant for example said,

“I did browse the Internet to look for more information but I am not really worried because I know that my son’s formula milk is not imported from China.”

(Sarah, 29, FF, Focus Group 3, City)

Similarly in other groups, China was mentioned negatively, even in discussions unrelated to formula milk contamination. All mothers felt confident that Malaysian-made formula milk is safe from contamination. One of them explained this,

“They (the tainted products) are dairy products from China. Most formula milk marketed here are imported from The U.S., the U.K, Australia and New Zealand. Not many formula milk are imported from China. The ones that are contaminated only came from China.”

(Verra, 29, FF, Focus Group 6, Rural)

Similar comments resonated in other focus groups. Lola for example said,

“I don’t think we are affected with this issue because most of our formula milk is produced and imported from New Zealand”

(Lola, 41, FF, Focus Group 8, City).

Like Lola and Verra, many mothers in the focus groups believed that formula milk imported from other countries, especially from New Zealand and Australia are considered safe for consumption. It should be noted that the worst affected company from the melamine contamination crisis, *Sanlu*, was partly owned by a New Zealand Company, *Fonterra* (43 % holding). Nonetheless, it was not clear whether this had any connection with the formula milk produced in New Zealand or other countries.

Discussions about formula milk in China corresponded with a generally negative view of Chinese products in Malaysia. Chinese products were often associated with poor quality (for example appliances or clothing that would break easily). Therefore, mothers' negative responses to melamine contamination fit within a broader context of their general view of China.

As one mother pointed out,

“All the bad stuff always come from China anyway” (Sarah, 29, FF, Focus Group 3, City).

Studies had pointed out that people’s (mis)understanding can contribute to misconceptions of risks. Kitzinger (1990 & 1993) in her research for example highlighted how audience used their pre-existing ideas of Africa to understand AIDS and HIV risk. Significantly, in this study it was found that the negative associations and stereotype about China and China health threats are mediated via existing misconceptions and prejudices about past health threats that came from China. Particularly, China was being perceived negatively because of the previous health crises which had originated there (i.e. SARS and avian influenza) and have had an impact on Malaysia, being a geographically close country. Media coverage of these outbreaks have also helped to disseminate fear as facilitated by technology of global media networks, which are able to bring distant images from one country to another within a short time frame (Pawanteh, et al, 2009). Wang (2006) furthermore argues that globalisation has impacted on the way people understand health crises and that few would consider SARS and other health outbreaks as strictly ‘local’ matters.

Reliability of sources

Many mothers mentioned the media as their primary source of information with regards to the melamine contamination issue. Some of them mentioned news, advertisements and Internet websites (for example, The Ministry of Health and formula milk companies). Overall, mothers expressed their confidence with the information that they have gained from the media. One research participant for example explained,

“This is why the mainstream news is important. They are the only trustworthy source of information. The information that we receive from circulated emails seemed a bit dodgy to me because people can always change the contents.”

(Damia, 31, MF, Focus Group 6, Rural)

Another participant in the same group agreed to this,

“I’ve received emails about this too (containing the list of products tainted). At first I did use them as reference. But it was not until it was confirmed in the news that I really felt safe and confident.”

(Verra, 29, FF, Focus Group 6, Rural)

Formula milk companies’ websites were also seen as reliable sources for information. However, the media could provide a platform to help confirm or eliminate mothers’ suspicions. As one research participant illustrated

this,

“If they (the formula milk companies) are brave enough to publish about this in the media, then I am confident that they are telling the truth. They cannot simply advertise false information on television you know. After all, everybody watches the TV and if something bad happens... something that contradicts to their statement, things can get ugly for them. So I’m sure they have done thorough research before making statements in the media. They wouldn’t dare to if they didn’t.”

(Nani, FF, 29, Focus Group 4, Town)

Yet not all mothers were convinced. Some research participants expressed scepticism towards the information they received from the media. Maria who has an older child on formula milk for example said,

“The first thing I did was to check the brand I was using. When I found out that it was imported from China I stopped and changed to a different brand. Even when the media did say it was safe. I didn’t want to take any risk.”

Maria also seemed unconvinced with actions taken by formula milk companies as she expressed later in the discussion,

“I worry that the contaminated formula milk were not withdrawn from the market. You never know, they (the formula milk companies) might just ignore it. They wouldn’t want to recall their products you know... in terms of businesswise, it would reflect badly on them. So, I don’t want to take the risk.”

(Maria, BF, 29, Focus Group 7, City)

In the focus groups, mothers mentioned several complications and illnesses as a result of consuming melamine contaminated products. This included indigestion, kidney failure and cancer². However, the way mothers talked about cancer may interact with their understanding of other health issues. It suggested that the media is not the only point of reference and that participants may have gathered information from other sources. It may also suggests that participants overlapped their understanding of risks of melamine with other risks (that may also be mobilised by the media), as argued by Seale (refer page 42). As one focus group respondent explained, “I believe that all health problems will eventually lead to cancer. Even the smallest hazard can trigger cancer” (Qaseh, 29, BF, Focus Group 1, City). Coincidentally

² Cancer was recognised as one possible effects of chronic exposure to melamine. However, the media did not highlight this in their reports. Yet, cancer was mentioned more frequently than other health implications of melamine in the focus groups.

(or not), cancer was also mentioned as one possible implication from using *Biphenol-A baby bottles*.

Overall, mothers who are directly affected by this issue said they took personal measures to make sure that their children were not exposed to contaminated products. Women who have stopped lactating cannot resume breastfeeding because of the physical difficulties for them to re-lactate. As a result, most formula feeding mothers either have to change formula milk brands or find a substitute for formula milk. Zahra for example told her story,

“I started to introduce cows’ milk to my older child. I stopped giving her formula milk at the time because I was afraid. I only switched back to formula milk after the government has reassured that the brand I was using was safe.”

(Zahra, 37, BF, Focus Group 3, City)

It is interesting to note that Zahra was still breastfeeding her youngest child at the time and did not mention about substituting her older child’s formula milk with her own. Another participant, Maria, who also breastfed her youngest child did not mention about substituting formula with her breast milk. She however said that the contamination issue had encouraged her to breastfeed her second baby exclusively. As she explained, “It is a horrible thing. I am now more determined to breastfeed my second baby for as long as I can” (Maria, 29, BF, Focus Group 7, City). Unfortunately, in the focus groups I had not thought of asking these mothers whether they had considered giving breast milk to their older children. However, as one participant mentioned, “to produce enough supply for one baby is already a challenge for mothers.” (Qaseh, 29, BF, Focus Group 1, City), therefore I would assume that mothers would prioritise their youngest child, who *may* exclusively depend on breast milk.

Aside from gaining information from the media, mothers also mentioned about information received from different sources. For example, one research participant explained,

“I sought for information from the Internet and the newspapers. But they also put up notices in supermarkets. And if you go to pharmacies, they would also advise you which brands are safe to consume. The information is also available at government clinics and local authorities. They are all conscious about this matter you know.”

(Nani, 29, FF, Focus Group 4, Town)

However, not all mothers felt worried or the need to take action. One mother particularly felt confident with the formula milk brand she was

using. Mas explained, “I am not worried at all. After all, I have always used this brand,” (Mas, 24, MF, Focus Group 9, Rural).

b) Bisphenol-A bottles

Bisphenol-A (BPA) is a toxic chemical substance that is hazardous to human health. It is commonly used to make many polycarbonate products including baby bottles. Research has proven that BPA seeps out from plastic bottles when heated and also escapes with regular washings. Among other things, consuming BPA substance was linked to health problems such as infertility, obesity as well as prostate and breast cancer (Carwile et al., 2009).

News about BPA in baby bottles appeared in the Malaysian media in early 2008 and has ignited some fear among parents with young children³. This issue concerned directly to formula feeding mothers however, many breastfeeding mothers are also affected because baby bottles were commonly used to store and feed expressed milk. In fact this issue does not only concern parents with infants, but parents with young children as well.⁴ Therefore, it can be argued that more children are at risks of BPA bottles than exposed to melamine contamination.

Research participants had various opinions about BPA in baby bottles and the risks involved. One mother explained that BPA is a chemical substance used in production of clear plastic bottles,

“I think BPA is a substance used to produce clear bottles. That is why some bottles are clearer than others. Usually the BPA-free bottles are quite yellowish. I think that is the purpose of BPA substance in baby bottles.”

(Iza, 29, FF, Focus Group 7, City)

Another participant also mentioned a similar idea. She explained,

“It is easy to recognise the [BPA-free] bottles. They are the ones that colour-fades easily. Not the pretty ones you know. The BPA-free bottles will turn yellowish after a while. But they are better than the clear ones.”

(Heidi, 27, FF, Focus Group 8, City)

3 At the time this study was conducted, BPA issue was still relatively new. The issue has since given more priority and emphasis by the government and the media. On 15 March 2011 the Malaysian government announced a ban on polycarbonate bottles containing BPA. The Minister of Health said the decision to ban these feeding bottles was taken “due to BPA’s risk to infant hormone systems”. Enforcement will be made in stages and industry is expected to comply by March 2012.

4 According to The Association of Registered Childcare Providers Malaysia, 99 percent of parents in Malaysia still continue using baby bottles for their children until they reach the age of four.

There are also mothers who perceived the opposite. Nani for example said, “Usually the good bottles wouldn’t fade colour. If you buy the cheap ones, those are the ones that would fade after two or three washes,” (Nani, 29, FF, Focus Group 4, Town). Some research participants felt that BPA would not harm babies yet they preferred to buy BPA-free bottles for their babies. One research participant explained this,

“In the olden days, it doesn’t matter how you feed [your children], they would still thrive... But things are different now... If I have the capacity to provide my children with better products, then why don’t I? Things are different now. Bottles have different chemicals. Time has changed.”

(Nani, 29, FF, Focus Group 4, Town)

Similar views were also discussed by mothers in another focus group:

Rania (29, BF): I believe that mothers in previous generations, especially those who lived in the villages... they all fed their children with whatever bottles they had. But look at us now. All of us grew up normal anyway.

Moderator: So does this issue worry you?

Mila (29, FF): I don’t think so.

Rania (29, BF): Not so much. But if you have the opportunity like me, I would choose BPA-free bottles. Because I’m aware of the risks and yes, I admit, I do use BPA-free bottles. I think it (BPA) can affect babies in the long run but probably not that much. Baby bottles are made of plastics, so whenever we heat them, there’s bound to have some chemical reaction so there are some risks to the baby.

(Focus Group 1, City)

Like Rania, there are a number of mothers who also believed that BPA could ‘leak’ out of baby bottles especially when heating the milk. Sterilising was also mentioned as another cause of BPA ‘leakage’. In one focus group, mothers negotiated both the needs and risks of sterilising baby bottles:

Julita (39, FF): But aren’t we supposed to boil the bottles? The doctors advised me to. You know, to kill the germs.

Dina (34, BF): Yes, to get rid of the germs but you never know...

Julita (39, FF): Exactly. We may kill the germs but we don’t

know what happens to the bottles when we boil them. That thing (BPA) is dangerous.

Dina (34, BF): This may also happen when we pour boiling water into the bottles you know.

Julita (39, FF): Maybe we should just use warm water then?

Dina (34, BF): Yes, just use warm water instead of boiling water.

(Focus Group 2, City)

In another group, one mother avoided sterilising bottles altogether. She explained,

“I don’t boil the bottles because then all the toxic will leak out. I just use the specialised bottle cleanser.”

(Heidi, 27, FF, Focus Group 8, City)

Some research participants also discussed BPA as a criterion when choosing baby bottles. One mother explained,

“I’m worried that it (BPA) will absorb into the milk... That is why I only buy BPA-free baby bottles. I don’t care how pricey they are. I would still buy them.”

(Maria, 29, BF, Focus Group 7, City)

However, not all mothers had the same opinion. For example, in one focus group mothers discussed several other preferences when choosing baby bottles.

Moderator: What do you look for when you buy baby bottles?

Lola (41, FF): I look at the price. And then the colours. Naturally as a woman, I am drawn to pretty things. If it is for a girl then I would choose red. Blue for boys.

Latiffah (28, FF): I would look for bottles with big mouth opening. It is easier to spoon in [the formula].

Heidi (27, FF): Another thing I would look at is the brand.

Latiffah (28, FF): Yes, but sometimes you can’t really trust the brand for quality assurance.

(Focus Group 8, City)

While majority mothers have the option to choose baby bottles, there were also some (mostly mothers in focus group 9) who do not have the luxury to do so. A stay-at-home mother Mas explained,

“I never buy them (baby bottles). Usually my husband is the one who buys them. If he likes it then he would buy it. Same goes with buying teats and pacifier. If the baby doesn’t like it then my husband would find a different one.”

(Mas, 24, MF, Focus Group 9, Rural)

This particular situation is common in typical low income families. In most cases, husbands are the sole bread winners and therefore, purchasing power is usually the father’s prerogative. Most of the time, the wife would usually not have a big say in family expenses. This was particularly observed in Focus Group 9 which was conducted with mothers from low income families and living in a rural village.

Overall, the BPA issue have raised some concerns among research participants. Mothers negotiated risks involved by referring to past experiences with bottle feeding and as a result, buying BPA-free bottles is seen as a *preferable* option for many, but not necessarily a necessity. Mothers have discussed other preferences for choosing bottles which included price, design and brand.

c) Toxin in breast milk

The third issue I will discuss here concerns toxin found in breast milk. Unlike the melamine scare and the BPA bottles, which both originated from outside Malaysia, the *toxin in breast milk* case is a domestic issue which directly concerns mothers in Malaysia. This issue became a public discussion when a news story published in *The Sunday Times* highlighted findings from a research conducted in a local state *Penang*. Among other things, the study confirmed findings of chemicals, classified as persistent organic pollutants (POPs) found in breast milk as a result of mothers consuming polluted water. This *toxin* is transferable to breastfeeding babies and when accumulated, may affect infants’ brain development, immune system and cause health deterioration which can reduce life span. Some of the excerpts from the news read:

Watch what you throw, it could end up in your child’s drinks. A research has found breast milk from a group of mothers in Penang to have certain toxic chemicals. Twenty-six samples collected from first-time mothers aged between 23 and 38 years old tested positive for dioxins and pesticides, among other contaminants... Toxicologist Professor Dr Mustafa Ali Mohd from University of Malaya said contaminated breast milk is not safe for consumption. “Can you imagine how much chemicals

you're exposing your babies to? You're practically giving them the chemicals through your milk... However, the study said that despite the contamination, experts have considered the benefits of breastfeeding have against any possible risk acquired by exposure to these chemicals, and therefore, have consistently recommended breastfeeding. Ecologist and toxicologist Professor Dr Ahmad Ismail from Universiti Putra Malaysia said breast milk is still the best choice because it provides components essential for the infant's growth and development. "Feeding formula milk is one measure to protect infants from POPs risk. But how we are to know that the milk and water used to prepare formula milk is not contaminated by POPs, infectious organisms or other environmental pollutants? The best solution is to reduce the levels of POPs in breast milk."

(The Sunday Times, May 11, 2008)

The news has ignited concerns among breastfeeding mothers and health practitioners. In response to this article, four *letters to the editor* were published within two subsequent weeks in the same newspaper, three of which were written by medical practitioners. All of them stressed the importance of breastfeeding in spite of the toxin scare and suggested that the article *can* be misunderstood by breastfeeding mothers. In one of the letters, the writer wrote "this article may discourage mothers from breastfeeding," (NST, May 21, 2008). This concern also resonated in all of the four letters. One letter issued by the Malaysian Paediatrician Association described the news as "alarming to breastfeeding mothers who might worry that they are contaminating and doing harm to their babies," (*The New Straits Times*, May 20, 2008).

Another letter was issued by the Director of *Family Health Development Division* which mentioned that *the government* was concerned over

...the recklessness and insensitivity of the report, especially with regards to certain statements, which seem to belittle breastfeeding and favour infant formula.

(The New Straits Times, May 27 2008)

The letter also condemned the report for generalising findings from a small scaled research. Another letter was written by a paediatrician and neonatologist *Dr Musa Mohd Nordin* who suggested that publishing the news was a *bad taste* decision. He explained that it was,

...badly timed and in bad taste. Bad timing because it is an old news rehashed to appear on Mother's Day. And in bad taste because it undermines the confidence of millions of women who

have lovingly nursed their babies with this 'Cinderella Milk'.

(The New Straits Times, May 15 2008)

It was significant that these responses came out in the same newspaper. It represented a degree of intervention by health professionals to control unnecessary fear to the public. These responses also suggested that the issue *can* scare mothers who *might* change their infant feeding choice from breastfeeding to formula feeding. However, it also assumed that mothers are unable to critically assess claims made in the media. When I talked to mothers in the focus groups, I found that this assumption was indeed oversimplified. Mothers, especially the breastfeeding mothers that I talked to were in fact critical of the issue. I will explore this next.

Mothers' responses

Most participants in the focus groups expressed disagreement to this issue when presented with the headline prompt. Mothers, particularly breastfeeding mothers, questioned the reliability of claims and research data by comparing their own experience and knowledge about breastfeeding. For example, mothers in one focus group discussed this:

Zahra (37, BF): I don't believe this. Is it really true?

Moderator: This headline was taken from our papers.

Zahra (37, BF): All I know is toxin passes through our urine.

Lina (29, MF): I remember my doctor telling me that breast milk is filtered from early on. So whatever we drink shouldn't affect our milk....Does this refer to serious chemical substance? Or is it actually about polluted rivers? I know that certain food contains toxin but it's not dangerous. So which one is it?

Joyah (29, FF): I think it's about polluted rivers. But most rivers are already treated and filtered right?

Zahra (37, BF): I think it is possible that the toxin would come from drinking tap water. We don't even know whether the bottled water is safe.

(Focus Group 3, City)

All mothers I talked to in the focus groups have no prior knowledge of the scare. This showed that when the media devote only a little coverage on an issue or crisis, they may not be successful in promoting awareness of the crisis or invoking audience responses at a larger scale.

It was also observed that breastfeeding mothers were more critical of

this issue compared to formula feeding women. Breastfeeding mothers often talked about their knowledge and their experience with breastfeeding when discussing this issue. In contrast, formula feeding women were more *affected* by the issue and expressed their concerns over how contaminated water *could* affect their babies. Among other things, mothers talked about the quality of water used to make formula milk. One formula feeding mother discussed this,

“I often use boiled water (from tap) to make formula milk. But after a while, I realised that my baby’s bottles had turned brown. It was almost like there was iron residue in them. So I stopped using tap water after that. I now use drinking water bought from stores... I am worried. What if it was iron residue and it was absorbed into the milk. I can’t imagine my child drinking contaminated water every day. So my husband and I decided to use the bottled water bought from stores.”

(Iza, 29, FF, Focus Group 7, City)

In another focus group, formula feeding mothers questioned the quality of drinks consumed outside their homes:

Khayra (33, FF): Well, you can never be too sure. Especially the drinks bought from roadside stalls. I would say that there is a good 50 percent chance that we would get toxin in our drink.

Bedah (29, FF): If you are a housewife, you could drink filtered water all the time at home. But for working mothers like us, we don’t always know the quality of our drinks.

(Focus Group 5, Town)

Further critical responses from research participants also brought up discussions about water filters. One breastfeeding mother said:

“I think this issue was initiated by water filter suppliers. They want to promote their products so they came up with this issue. You can find a lot of filters in the market nowadays, Bio Aura, RO... I think they purposely brought up this issue so people won’t buy mineral water from the stores anymore and invest in their water filters instead.”

(Cinta, 29, BF, Focus Group 4, Town)

Water filters were also mentioned in other focus group:

Damia (31, MF): We have to use Bio Aura... you know, the water filter.

Moderator: Do you use it?

Damia (31, MF): Yes, at home. Because you never know whether the water is clean or not. You don't know where it came from.

Verra (29, FF): Some people use that nano thing. Nano technology. They break down into nano particles in the water. But they clean the water effectively.

(Focus Group 6, Rural)

While discussing about toxin in breast milk, breastfeeding mothers also discussed about breasts ability as filters. Subsequently, mothers debated the existence of toxins in breast milk:

Hannah (29, BF): I think everything is being processed first in the body before it becomes milk. So everything should be good even though we eat... well, as long as we eat good food. They are not going to turn into breast milk straight away. Unless if we consume something unhealthy, like alcohol.

Qaseh (29, BF): I know that a lot of medicines are not suitable for breastfeeding mothers. Whenever I go to see my doctor I always tell her that I am breastfeeding. So she only prescribes me with medicines that are safe for breastfeeding. I would make sure that I remind her because I'm afraid what the drugs can do to the baby.

Hannah (29, BF): Generally, I think all food should be fine.

Rania (29, BF): I once read that you can't immediately enrol yourself into slimming programme [after giving birth] because of all those toxins stored in your body. When you breastfeed and at the same time try to lose weight, the accumulated toxins will seep into... well I don't know how it happens, but it will seep into the breast milk and our babies can be affected.

(Focus Group 1, City)

Overall, breastfeeding mothers were critical towards this media story. These women used their knowledge of breastfeeding in their responses. It was observed that the formula feeding mothers were more influenced by this issue and expressed their concerns over the quality of water which could affect formula milk. Breastfeeding mothers on the other hand critically assessed this issue and offered different *ideas* as to why the media chose to report this issue. On the other hand, formula feeding mothers were more

persuaded by this story and how they understand other issues such as water pollution.

The responses showed that participants brought in their own understanding of “toxin” and other pre-knowledge of health issues into their overall response to the issue of toxin in breast milk. This was similar to Henderson and colleagues’ (2011) findings where men in her study thought that breastfeeding could pass on cancer to babies.

Blurring of issues

As mentioned earlier, there are participants in the focus groups who tend to mix these three issues together in their responses. For example, research participants often overlap their understanding between melamine and BPA plastic, treating these two as the same thing. These two responses demonstrated this:

“It is the same issue isn’t it? They (melamine contamination and BPA in bottles) are the same. The effects are the same too. But we don’t call plastic contamination melamine, we call it BPA.”

(Zahra, 37, BF, Focus Group 3, City)

“I’ve heard from a friend. She mentioned about baby bottles made from melamine plastic. They are not good. Whenever we heat the bottles, melamine would contaminate the milk.”

(Lina, 29, MF, Focus Group 3, City)

Lina added later on in the discussion, “They mentioned about *melamine in bottles*, but I’m not sure how *much melamine is there in the bottle*,” (Lina, 29, MF, Focus Group 3, City).

Another common issue brought up by mothers when discussing the two events were the health implications. Cancer was mentioned as the outcome from excessive exposure to both *melamine* and *BPA*. One research participant said “Melamine is being widely used in plastics substance. That is why people say don’t use plastics, because it would cause cancer.” (Sarah, 29, FF, Focus Group 3, City).

Interestingly, one mother mentioned about melamine risks in plates. She explained,

“People are starting to be cautious of using dinner plates because some dinnerware is made of melamine. The melamine plates have solid composition and don’t break easily... Many have changed from using melamine dinnerware to glass-made dinnerware because of this (risk of melamine contamination).”

(Iza, 29, FF, Focus Group 7, City)

Also, there were mothers who associated BPA to plastic containers. For example, one mother talked about risks of storing food in plastic containers.

“I have heard about the plastic containers for storing breast milk. Some people use the small Tupperware plastic containers. I know those containers are not good. Because when you warm them up, the BPA from those containers leaks into the milk. You have to use containers that are made specifically for storing breast milk.”

(Qaseh, 29, BF, Focus Group 1, City)

Mothers in another focus group on the other hand, discussed risks of drinking from plastic cups:

Dina (34, BF): We can be affected too. Like when we use plastic cups for our drinks.

Julita (39, FF): You mean when we use them for hot drinks?

Dina (34, BF): Yes, the chemical substance becomes active you know, and when we drink from them, it would affect us too.

Julita (39, FF): I guess that's true. Even with the plastic containers to keep our food. Like those take-away polystyrene containers that we normally use. We have to be careful, especially if the food is hot.

Dina (34, BF): Yes, any kinds of plastics really, even plastic cups.

Julita (39, FF): Especially the disposable ones.

Moderator: Does this issue affect you in any way?

Dina (34, BF): I guess it does. Especially now... I used to not care before this. But when people start discussing about this issue... I saw it on Selamat Pagi Malaysia (a local morning chat show on TV). One professor was talking about this. And it made me think you know. All the plastic cups can only be used for cold drinks. I used to make hot tea in plastic cups, but now I only use glass cups. Some people question why they get sick even though they only eat healthy food. They don't realise that the little things like this (the plastic food container) is the reason they get sick.

(Focus Group 2, City)

It can be observed that mothers' understanding of BPA, melamine and toxins is complex. It overlapped with the mother's experience and knowledge, as

well as their risk assessment towards other issues. More importantly, these risks are generally conceptualised and build on one another in the process of understanding risks. Significantly this influenced how mothers defined risks and associated them to different infant feeding issues. However, at the same time, too many health issues highlighted in the media can ‘blur’ the distinctions between one issues and another, thus contributed to a distorted understanding of infant feeding risks.

Conclusion

In this paper we explored the responses from mothers to three infant feeding issues and provided examples of how mothers negotiated their understanding of each issue individually and collectively, as part of their risk assessment process.

In the *melamine* case, it was observed that many mothers relied on information from the media to get government updates and information about the tainted products. Mothers also suspiciously talked about products from China, particularly formula milk products imported from the mainland which were highly suspected for melamine contamination. Many formula feeding mothers in the focus groups expressed their concerns and some took measures to substitute or change to other formula milk brand or cow’s milk. However, breastfeeding mothers who have older children on formula milk did not mention about supplementing their older children with their own breast milk.

Unlike the melamine contamination, mothers were less worried of the risks of using BPA bottles. Most of them saw BPA-free bottles as a *preferred* choice and not necessarily seen as risky. Mothers talked about the lack of proof as to how BPA can affect babies. Nonetheless, mothers who were more concerned about this issue and were well-informed about the risks (for example Rania) felt that it was necessary to change to BPA-free bottles.

Media reporting of toxin in breast milk issue on the other hand sparked much criticism especially from the breastfeeding mothers. These mothers brought in their experience and knowledge from breastfeeding into their responses, most were sceptical of the story and the motivations behind it. The media report also attracted health experts’ responses in the media. Among other things, these health experts expressed their concerns over mothers who may be influenced by this report to stop breastfeeding. However, as my study demonstrated, the formula feeding mothers were more affected by this issue compared to the breastfeeding mothers. Formula feeding mothers were generally convinced that toxin *is* present in water and talked about for example, the risk of contaminated water that could affect formula milk.

It was observed that mothers often overlapped their understanding of infant feeding risks with other health risks. For example, there were mothers who associated melamine contamination with melamine plates, leaking plastic cups and food containers. Mothers’ understanding of infant feeding risk therefore,

overlapped with their understandings of other different health issues. This often occurred when respondents are less aware about an issue and the risks involved.

It was also observed that issues that had more media coverage were more salient among the respondents. For example, risks of melamine contamination received more coverage in the media as opposed to toxin in breast milk or BPA bottles therefore, respondents were able to recall the risks involved and took action. Also, as a result, mothers were generally more worried about the melamine contamination (even when they are not directly at risk), as opposed to risks of using BPA bottles (in which their babies are directly at risks).

The media therefore has a role to mobilise/highlight danger/risks to its readers and convey information on the different degrees of danger/risks involved with different health issues. However, participants often reacted to media reports on infant feeding risks in a “holistic” way, and in relation to their experiences as formula and breastfeeding mothers.

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