



### **Ruth De Souza**

***Ruth De Souza is a nurse, academic and community engaged researcher in gender, race, health and digital technologies. She recently completed a Vice-Chancellor’s Fellowship at RMIT University, based in the School of Art and Design. Prior to being at RMIT, Ruth was the academic co-convenor of The Data, Systems and Society Research Network (DSSRN), a collaborative research network across the University of Melbourne. Ruth’s Fellowship will engage health professionals in finding new ways to understand, co-design and implement sustainable cultural safety initiatives in a range of health contexts in response to health inequities. She also has her own consulting practice.***



## **Sukhmani Khorana**

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***She is interested in media, migration and affect, and her research focuses on multi-platform refugee narratives, the politics of food, the role of emotions in social change, cultural diversity in media and culture, and self-representation by young people of colour. Through her research, Sukhmani aims to create broader awareness about the lives of asylum seekers and refugees and contribute to the capacity-building of disadvantaged migrant communities.***

# **South Asian Mothers in Australia Using Apps during COVID-19: The Limitations of Online Technologies and Design**

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## **Abstract**

**New Mothers and Apps during COVID-19 is a situated and in-depth look at the experiences of six cisgender South Asian-Australian women/people who gave birth during the COVID-19 pandemic. Prior to the pandemic negatively racialised women experienced barriers to healthcare and a lack of social support, which were further exacerbated during the COVID-19 pandemic. International border closures in Australia combined with local mitigation strategies inhibited social and cultural support from families, impacting many migrant mothers/birthing people who gave birth for the first time in Australia. Many hospitals in the states of New South Wales and Victoria instituted restrictions to birthing services as a way of reducing exposure to the coronavirus during the pandemic. These restrictions varied, including not allowing partner attendance for antenatal appointments, reducing support people to only one person present during the labour and birth, and sometimes not permitting partners on postnatal wards.**

**Our research suggests pre-existing limitations of healthcare providers, services, and apps, with regard to culturally and linguistically diverse (CALD) women in Australia, have been**

amplified during the pandemic. Disruptions in the physical and social presence of family, friends and healthcare workers added significantly to the everyday stress, anxiety, and challenges faced by new parents. Most resorted to online apps and platforms more than ever to cope, and this had both advantages and limitations.

## **Keywords**

*Pregnancy Apps, COVID-19, New Mothers, App Design, Online Platforms*

## **Introduction**

The purpose of the project was to understand the perspectives and experiences of migrant South Asian-Australian mothers who gave birth during COVID-19 and were using digital apps and online platforms in the perinatal period. This included first and second-generation migrant women from South Asia as well as South Asians from the global diaspora, that being countries such as Singapore who had migrated to Australia. Data was collected in interviews with women who met the above criteria, were resident in Sydney or Melbourne, and who gave birth during the COVID-19 pandemic.

Our research aims were as follows:

- *Understanding how COVID-19 impacted on the women's pregnancy and early parenthood experiences.*
- *Exploring women's access to social networks (family or friends) in Australia during COVID lockdowns.*
- *Mapping how information sources are used to inform which pregnancy/parenting apps are used, and how these compare with information from healthcare providers.*

- *Investigating tensions between information from the apps, parenting philosophies, and practices from culture of origin, other support networks and posts on social media.*

## **Background**

Even though the perinatal period is a time when health support is generally more available compared to other times in a lifespan, there is evidence digital technologies, including apps and platforms providing access to online parental communities, are necessary assemblages of support. As Veazey (2020) observes, the emergence of a personalised media landscape represents dynamic assemblages of support and identification rather than being 'virtual ghettos'.

The project outlined here shares the complex nature of negotiations between the cultural politics of technologies such as apps and online platforms, and their users from migrant South Asian backgrounds, a sub-group within the category of CALD. These users also likely have to navigate the different terrains of pregnancy and parenting-related information from their cultures of origin, and knowledge received in the form of 'medical expertise' from healthcare providers in Australia. The project contributes to a growing body of scholarly work about the use of pregnancy apps among women from CALD backgrounds in Australia, and evidencing of a heightened level of anxiety amongst first-time mothers who gave birth during COVID-19. It also contributes to emerging research about the value of apps and app design in the perinatal period, particularly for CALD women who did not have access to family support due to international border closures during 2020 and 2021.

## **Participants' Stories**

**Nalini arrived in Australia from Singapore in 2007 and moved to Adelaide to study social work. She now lives in Melbourne and works in the family violence field. She lives with her husband, but her family are mainly in Sri Lanka and Singapore, and she has a sister who lives in Norway. She uses *WhatsApp* video calling daily to talk to family. Nalini received health care from her GP and had her baby at the Royal Melbourne hospital. Most of the support Nalini received came from her husband's family, as all her friends are in Adelaide. Nalini found it difficult having a baby in Melbourne during the lockdowns. She had planned for her mother to visit and help with the baby and various confinement rituals, but had to do these herself. Her sister in Norway was very helpful as she had a baby around the same time, and she created a Google drive to document and save recipes for special food that had to be cooked. She also found *Facebook* groups really helpful for gaining information because her antenatal classes were cancelled. Nalini didn't post in these groups because she didn't want to be judged, as she had experienced being judged when accessing parental and child health services. Nalini used an app for pregnancy planning and another to help decipher her baby's sleep changes. She has felt very isolated during the lockdowns.**

**Neeta has been in Australia for five years. She migrated from Pakistan to join her husband. They first lived in Sydney, then moved to Tasmania. She trained as an Advanced Gestalt Therapist, but found it hard to get a job in Tasmania. She worked in the security field for 10 months before the pandemic and was made redundant during the pandemic. Ten days later she found**

out she was pregnant, at a time when she and her husband were both unemployed. Sadly, she lost her father to COVID-19-related complications one month before she was due to give birth. She has two close friends and has made other Pakistani friends. She has found *Baby Centre* very useful, especially the forums and the weekly alerts/updates. She also used a few *Facebook* groups for information, including one where all the babies were due in November. Her cultural traditions have been important to her, and she has noticed the different cultural values in the apps and *Facebook* groups.

Muskaan moved to Australia from Pakistan with her husband in 2015 and is a policy advisor. She gave birth to her first child in July 2020 and returned to full-time work while her partner was on parental leave. She had hoped her mother would be able to join her from Pakistan, but the pandemic made that impossible. Muskaan found it difficult to connect with other new parents due to the pandemic. She used *Baby Centre* during her pregnancy, enjoying its tracking features and later the discussion forums after her baby was born. She tried *Peanut*, but it wasn't for her. She uses other technologies to chat daily to her mother and share photos of her child. She enjoys looking up information and reading, but did not adhere to many culturally specific practices for birthing and post-partum care.

Varsha is an IT professional, cloud engineer, who arrived in Sydney with her husband in 2018. They really like living in Sydney and are from Jammu, India, though they also lived in Delhi for a long time. They were not expecting parenthood without family support, and

that has been the most challenging part of giving birth during COVID-19. Varsha downloaded a number of apps for pregnancy and parenting, but uses *Baby Centre* most frequently because it has discussion forums. She has also joined various kinds of mums' groups on *Facebook*. She finds them most useful for posting questions and learning from others, particularly with an issue arising ahead of time. Varsha used the app *Peanut* to connect with other mums in the area with similar-aged babies and now they are close friends. She uses *WhatsApp* video daily so both her and her husband's families can see the baby. She did not follow any traditional advice during pregnancy and early parenthood, as she and her husband prefer to look things up themselves and follow it only if it makes sense to them. She did talk to her sister a lot when she was pregnant, as her sister is a doctor in India, whose advice was useful when comparing Indian and Australian foetal measurements.

Pakhi came to Australia from India in 2008. She lives with her husband in Melbourne and their families live in India. She is a second-time mother and gave birth to her second child in May 2020. Pakhi has had complicated pregnancies both times as she had preeclampsia. During her first pregnancy, she felt supported because her family could visit her in Australia, and her mother-in-law was able to cook all the meals and massage her. Through her second pregnancy, during the peak of COVID-19, she could not have her family over due to border closures. She struggled physically and emotionally to take care of herself and her two babies without family support. She missed out on traditional cultural food and care practices during pregnancy the family would have



helped with. However, she stayed in close contact with her mother and mother-in-law using video and phone calls and took their advice on most things. She accessed mothers' groups on *Facebook* and found the information and social interaction on these groups useful. She would have liked more support from childcare services and the healthcare system during the pandemic.

Janvi is a software engineer who came to Australia from India on a temporary visa in October 2014, and got married in 2015. She and her husband did not plan on having a baby before the pandemic hit. But after losing her mother-in-law during the pandemic and not being able to visit India for her funeral, she and her husband decided to have a baby and create their own family. Janvi became pregnant in February 2021 and was relieved COVID-19 impacted her pregnancy less. She felt safer being in Australia as pandemic measures were more efficient compared to other countries, especially India. However, she would have liked to have had her family members come to Australia to provide support during the last trimester of her pregnancy, but she could not. She largely used the *Baby Centre* app, which she found convenient and informative. She also finds *Peanut, Instagram*, and online mothers' groups useful. Her family's cultural practices and rituals were important for her during her pregnancy, especially around food, but she also adapted and rejected some cultural aspects such as preparing and shopping for items before the baby was born.

## Conclusion

There is evidence, even before the advent of COVID-19, negatively racialised women experienced barriers to healthcare, and these

barriers have been exacerbated during the COVID-19 pandemic. The scaling back and reconfiguration of perinatal health services and the switch in emphasis from patient-centred care to the protection of healthcare systems, combined with the inability of family and cultural support to be provided during the pandemic, is likely to have set up a difficult transition to parenthood for many new migrant parents. Despite the participants in our study being adept with using *WhatsApp* groups, *Facebook*, instant messaging, and video calling to connect with family and friends, in-person family support was missed. Many participants found culturally appropriate or birth-congruent peer support, validation, and information from other mothers through *Instagram* and *Facebook* groups to complement information from apps. Despite their digital literacies, however, many found the substitution of virtual care for face-to-face services during the pandemic left them with a less than satisfactory perinatal experience. Consequently, there remains a need for patient and family-centred engagement by health services to provide equitable, high-quality birth care, and to help design pregnancy and parenting apps that are non-commercial and culturally-attuned.

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