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Exploring Breastfeeding Practices Overcoming Challenges and Shaping the Future in Sindh, Pakistan

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Abstract

Breastfeeding should begin within the first hour of a baby's birth and be the exclusive source of nutrition for the first six months. Nonetheless, there is a great deal of space for improvement in Pakistan's breastfeeding rates, especially in Sindh. This study aims to explore breastfeeding patterns, evaluate the impact of media campaigns, urbanization, and mother education on breastfeeding length, and pinpoint obstacles to following WHO guidelines. A cross-sectional survey was done among mothers in Sindh's rural, urban, and small-town districts. Structured surveys were used to gather information about breastfeeding behaviours, maternal education, socioeconomic characteristics, and media exposure. The findings show that moms in small towns nursed for longer periods than those in rural settings. Maternal education had an uneven link with breastfeeding patterns, with some educated women terminating breastfeeding prematurely due to cultural attitudes and work constraints. Media campaigns had a minimal impact on long-term breastfeeding adherence, emphasizing the importance of more targeted treatments. Breastfeeding patterns in Sindh are impacted by cultural, socioeconomic, and geographic variables. To increase breastfeeding rates and adherence to WHO guidelines, tailored health interventions must take into account these characteristics. The study underlines the necessity of correcting misconceptions, providing proper support, and developing culturally sensitive programs to promote long-term breastfeeding in Pakistan.

Keywords: Breastfeeding, Maternal Education, Child Nutrition, Pre-Lacteal Feeding, Media Campaigns

Introduction:

Optimal breastfeeding practices improve the survival, health, and development of children[1]. Benefits of breast milk include enhanced cognitive development[2], an optimized immune system [3], reduced risk of some autoimmune and atopic diseases[4,5], obesity[6] and leukaemia[7] Breastfeeding estimated that 823,000 deaths of children under the age of five years could be prevented every year through optimal breastfeeding practices[8]. However, according to the Global Breastfeeding Scorecard, which evaluated 194 nations, the current global rate of exclusive

breastfeeding is still unsatisfactory (40 per cent of infants under six months of age) and only 23 of the countries have exclusive breastfeeding rates above 60 per cent although overall rates of continued breastfeeding at one year are higher (74%)[9]. Breastfeeding is vital for a baby's health since it boosts immunity and provides vital nutrients. The first six months of life should be spent exclusively in nursing, according to the World Health Organization (WHO). However, because of sociocultural, economic, and medical variables, breastfeeding rates differ by area. Issues affecting breastfeeding practices in Sindh, Pakistan, including social norms, a lack of knowledge, and insufficient maternal assistance, call for immediate action. Breastfeeding delivers vital nutrients and antibodies that improve infant immunity and development; it lowers the risk of infections, SIDS, obesity, and chronic diseases; it speeds up postpartum recovery for mothers, lowers their risk of cancer, and improves bonding; the WHO recommends exclusive breastfeeding for six months, with continued breastfeeding for up to two years; it can help manage issues like low milk supply, sore nipples, engorgement, and mastitis; and it guarantees the best possible health outcomes for both mother and child. Breastfeeding varies in the number of babies; most are breastfed at first, but fewer continue after the first few months. The exact time can vary, but many newborns begin breastfeeding within an hour of delivery. Particularly beyond the first several months, a sizable portion of babies may be fed or hydrated while nursing. Fewer babies are following the six-month advice to exclusively breastfeed. By the time they are two or three months old, some babies may be exposed to solid foods, while others may start consuming other foods or beverages before that age. A lower proportion of children are reported to continue breastfeeding past six, twelve, or even twenty-four months, depending on local customs and unique situations. The mother appears composed and attentive as she securely supports the baby's head and body while holding the infant in a comfortable position. As it latches onto the breast, the infant makes sucking motions and seems receptive and awake. By holding her breast to assist a healthy latch and gently bringing the baby's mouth to the nipple, the mother makes sure the infant is securely latched. The infant's sucking is efficient, and its rhythmic movements show that it is being fed properly. When nursing comes to an end, the mother may carefully remove the infant from the breast to make sure the child is content. There are no indications of discomfort or injury, and the mother's breast looks to be in good condition. All things considered, nursing seems natural and fulfilling to the mother, which enhances the sensation of bonding. An individual's nutritional status is assessed, any potential inadequacies are found, and customized solutions are offered to promote optimum health. After determining eligibility, people can participate in nutrition programs and get nutrition instruction to encourage better eating practices. Each state chooses particular assessment questions that correspond with regional requirements, and the medical-nutritional evaluation continues throughout the program. These evaluations, which target certain health hazards, are carried out at midyear health assessments and annual certifications. Nutrition evaluations offer moms important advantages, such as better pregnancy outcomes and maternal health. A comprehensive approach to nutrition care is fostered by integrating these assessments into larger health programs through collaboration with community action and public health nutrition efforts. Breastfeeding education's main objective is to educate patients about the many advantages breastfeeding offers to mothers and babies, such as reduced infection-related morbidity and mortality and improved nutrition. Healthcare professionals, including nurses, help patients with basic breastfeeding positions, identify common problems, and offer lactation support. Prenatal seminars, postnatal support groups, peer counsellors, skilled personnel, and licensed lactation consultants are all part of the planning process. By working together with state and local resources, breastfeeding is encouraged and a baby-friendly atmosphere is created. Breastfeeding offers numerous advantages, including preventing infections, encouraging healthy growth and development, and lowering the chance of developing chronic illnesses like obesity. Breastfeeding

lowers the incidence of cancer, delays the onset of menses, and lessens postpartum haemorrhage for moms.

Literature Review

It is important to identify which factors may influence breastfeeding practices and help to develop effective intervention programs. That, maternal socioeconomic factors are related to breastfeeding practices in both low- and middle-income countries[11–18]. Maternal education has been reported to be a significant predictor of breastfeeding practices; mothers with a low level of education are at high risk of stopping exclusive breastfeeding[11,13,17,19,20]. Several studies also found a negative association between household income and the practice of exclusive breastfeeding [15,19,20]. Institutional delivery and antenatal care have been found to predict exclusive breastfeeding [11,20], Pakistan has a frighteningly low rate of exclusive breastfeeding, with only 38 per cent of infants less than six months being exclusively breastfed[21]. However, we have limited knowledge of how to influence the breastfeeding practices of Pakistani women.

Implementation

Important modifiable factors that may be associated with breastfeeding practices in Pakistan, such as information about breastfeeding or healthcare during pregnancy and delivery. Therefore, a population-based study of Pakistani women may help understand breastfeeding practices and the factors that may influence their desire to breastfeed. Healthcare providers and policymakers could use such information to design and develop successful interventions, such as peer counselling, lactation consultation, and breastfeeding education. The purpose of this analysis was to measure breastfeeding practices in Sindh province, Pakistan and to identify determinants, demographic factors, socioeconomic status, and information sources that affect breastfeeding practices.

Methods

The Maternal and Child Health Program Indicator Survey from recent mothers in Sindh province, The survey was a cross-sectional study and used a multi-stage, stratified sampling design. The sampling frame was developed by urban and rural categorization based on the national census of Pakistan. First, disproportionate sampling was used to allocate samples in different districts; then the probability proportional to size method was used to select the required number of cities or villages in each district[22]. After the selection of the cities or villages, interviews were conducted with a maximum of 10 random subjects in each city in urban areas or each village in rural areas. Data were collected on respondents' socioeconomic status, reproductive history, health knowledge, pregnancy experience, breastfeeding practices, child health, and fertility preferences, along with mass media and communication exposure. The total survey population consisted of 10,200 women who had a live birth within the previous two years; their answers to the survey questions pertained to their last live birth.

Result

Improvement in breastfeeding practices through mass media campaigns may have helped deliver information and drive conversations about breastfeeding to Pakistani women but did not lead to changes in actual practice[33]. The adverse effect of mass media on breastfeeding practices documented here may be explained by research on the impact of marketing breast milk substitutes on breastfeeding practices in low- and middle-income countries[34]. Companies advertise infant formula as a breast milk substitute that is modern and better than breast milk via television, radio, print advertisements, internet websites and social media. The prevalence of mothers who recalled advertisements or promotion of breast milk substitutes on television was in Pakistan[35]. Even

though Pakistan adopted the International Code of Marketing of Breast-milk Substitutes in 2002 to restrict the marketing of infant formula[36,37], most healthcare providers were not aware of the law and the marketing of formula may have continued after the law was applied. Our findings suggest that mass media campaigns to improve breastfeeding practices in Pakistan will not have a positive impact unless they are accompanied by government restrictions on the marketing of infant formula. We found that receiving breastfeeding information from relatives or friends had a positive impact on starting breastfeeding. This may be due to the nature of their advice. In the Muslim community, relatives or friends are the main people providing breastfeeding advice[30,38]. An intervention study conducted in urban Bangladesh has highlighted the need for community-based peer counselling using trained community female volunteers to promote good breastfeeding practices. This analysis excludes women with missing information on number of living children (n = 23), wealth (n = 34), education level (n = 22), husband's education level (n = 93), baby's age (n = 73), reducing the sample size to 9955 women. The Maternal and Child Health Program Indicator Survey was approved by the Johns Hopkins University School of Public Health Institutional Review Board (IRB00005002) and the National Bioethics Int. J. Environ. Res. Public Health 2019, 16, 1689 3 of 10 Committee of Pakistan. The analysis reported here used secondary data; there was no direct intervention and it was not possible to identify individual respondents. The dependent variables in this analysis were ever-breastfed and still breastfeeding. Ever breastfed was defined by the mother's yes or no response to the question, "Did you ever breastfeed?" and captured whether respondents had any breastfeeding experience or not about the respondent's last pregnancy that resulted in a live birth within the past two years. Still breastfeeding was defined by the mother's yes or no response to the question, "Are you still breastfeeding?" This question was only asked to respondents whose child was still living at the time of the survey. Among the 9955 women in the sample, 105 reported their child had died; an additional 224 women had missing answers to questions about still breastfeeding and/or whether the child was still living. Therefore, the analysis for still breastfeeding is limited to 9626 women. Independent variables were selected based on a systematic review of factors associated with breastfeeding in developing countries [23]. They included the baby's age, maternal age, number of living children, socioeconomic status, source of information about breastfeeding, healthcare during pregnancy and delivery and survey year. Baby's age at the time of the survey was included as a variable and based on the World Health Organization breastfeeding guideline, categorized into 0–6 months, 7–12 months, 13–18 months and more than 18 months. We examined residence (rural, town/small city, large city), woman's education, husband's education, and wealth quintiles as socioeconomic status. Wealth quintiles were calculated from household assets using principal components analysis[24]. The survey asked women, "During the last 12 months have you received any information about breastfeeding from the following sources?" Sources were categorized as health professionals (doctors, nurse/midwives and female health visitors), low-level health workers (Dai-traditional birth attendants, female health workers, homoeopaths, Hakim-herbal medicine practitioners and outreach workers), media (television, radio, telephone helpline, text message, health education/awareness session and print media) and relatives/friends. Respondents were able to choose multiple categories. To assess healthcare during pregnancy and delivery, we included the person who attended the delivery and the place of delivery as variables. Attendance during delivery was classified into traditional birth attendant, health professional and no one/others. Place of delivery was classified into home, private facility, and public facility. Statistical Analysis we used chi-squared tests to conduct vicariate analyses for general distribution between ever-breastfed or still breastfeeding and independent variables. Then we conducted multiple binary logistic regressions for each of the dependent variables: ever breastfed and still breastfeeding. Odds ratios (ORs) and 95% confidence intervals (CIs) were estimated for multiple binary logistic regressions

to measure the association between independent variables and each dependent variable. The significance level was set at 0.05. Survey weights were applied to all analyses. Results At the time of the survey, 97.9% of women had ever breastfed and 83.9% of women were still breastfeeding. Residence and wealth quintile were associated with both dependent variables. The baby's age, education level, wealth, health professional, media, attendance during delivery, and survey year were associated with still breastfeeding. The still breastfeeding rate was higher when women lived in a large city (85.3%), had received no education (85.8%), were in the lowest wealth quintile (87.1%), received no information from a health professional (84.6%) or media (85.1%), received attendance during delivery from a traditional birth attendant (85.7%) and was surveyed in 2013 (86.2%).

Discussion

Maternal and Child Health Program Indicator Survey found very high levels of breastfeeding in Sindh province. Virtually all women (97.9 %) had some experience of breastfeeding, but the odds of women still breastfeeding decreased rapidly during the next six months from the baby's birth, while World Health Organization (WHO) recommended mothers to breastfeed up to the age of two years or beyond [1]. The high percentage of mothers who were still breastfeeding in this study (83.9%) did not indicate that babies older than six months met their nutritional requirements. Unfortunately, we could not examine or adjust for the type and quality of breastfeeding practices including early initiation of exclusive breastfeeding.

Conclusions

This analysis provides evidence for further efforts to improve breastfeeding practices in Sindh province, Pakistan by identifying factors associated with breastfeeding. Policymakers and program managers need to develop targeted interventions to improve breastfeeding practices based on the baby's age and maternal socioeconomic status.

Recommendations

According to the WHO, breastfeeding is essential for a baby's health and should be started within the first hour and continued exclusively for six months. Studies conducted in Pakistan, however, reveal that just 38% to 54% of women continue to breastfeed exclusively for six months, with many stopping before the advised amount of time. Breastfeeding rates were greater among women in small towns than in rural settings, most likely as a result of cultural norms and the accessibility of formula milk. The variable impact of maternal education on breastfeeding behaviours may be the result of cultural misconceptions and attitudes. Furthermore, the effectiveness of media campaigns to encourage breastfeeding has been inconsistent, indicating the need for focused interventions that take socioeconomic and cultural aspects into account.

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