General Knowledge about Sudden Infant Death Syndrome Prevention Measures among Flemish Mothers

Prospective Study with an Anonymous Survey

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Keywords

Sudden Infant Death Syndrome ; Prevention ; Parental knowledge.

Abstract

Objective

Sudden Infant Death Syndrome (SIDS) is influenced by various environmental and parental factors, despite existing preventive measures. At present little is known about the knowledge of Flemish mothers to reduce SIDS.

Methods

This study aimed to evaluate Flemish mothers' awareness of SIDS prevention methods through an anonymous online survey.

Results

A total of 201 mothers participated, with an average score of 6.22 out of 9 (69.11%) on the evidence-based section. Most mothers (89%) recognised the supine sleeping position as safest, but fewer acknowledged the benefits of breastfeeding (46%) or pacifier use (19%). Only 42% acknowledged the limited effectiveness of monitoring devices. Higher education correlated with better knowledge ($P<0.001$, OR = 3.194), as did cohabitation ($P = 0.086$, OR = 2.519). Mothers with more children tended to have higher scores than those with two children, but lower scores than those with one child. Non-scientific information mainly came from friends, family, and social media. Confidence in doctors' information about SIDS was highest among young mothers (79.1%).

Discussion and conclusion

The study suggests updating prevention recommendations and campaign strategies in Belgium, targeting specific demographics such as lower socio-economic backgrounds, lower education levels, and single mothers. While Flemish mothers show encouraging awareness levels, there's still a need for focused interventions to improve knowledge and adherence to preventive measures.

Introduction

Cot death or sudden infant death syndrome (SIDS) describes the sudden death of a child younger than one year without obvious cause after a full investigation including autopsy, examination of the circumstances of death and review of the child's medical history (1). The peak incidence of this phenomenon is between the age of two and four months. Sudden unexpected infant death (SUID) is a broader term referring to “a sudden and unexpected death, whether explained or unexplained, occurring during infancy” and includes SIDS and other sleep-related infant death such as ill-defined death and accidental suffocation and strangulation in bed as described by the American Academy of Pediatrics (AAP) (2). Jullien S. (2021) states that “for any SUID, if the cause of death after case investigation is not attributed to an explained cause such as asphyxia, suffocation, infection or metabolic disease, the case is classified as SIDS, which is a definitive diagnosis reached by exclusion” (3). Sudden infant death always occurs during sleep, either at night or during daytime sleep. Following the introduction of safe sleep campaigns such as the Back to Sleep Campaign in the early 1990s, the incidence has fallen dramatically. However, it has not been reduced to zero and has stagnated in recent years (4). SIDS therefore remains the leading cause of infant mortality in high-income countries (an average of 19.8/100 000 livebirths across 14 European countries between 2005 and 2015) and the third leading cause of infant death worldwide (3). Since the 1990s, the figures in Belgium show a significant decrease in sleep related deaths in infants. The most recent figures are from 2018, with 6 cases of SIDS. This corresponds to a rate of 21.2/100 000 live births in Belgium.

To date, no biological explanation for this phenomenon has been found. However, over time, several theories have been put forward as to the possible causes and mechanisms of SIDS. The most influential theory was developed by Wedgwood in 1972 and later revised by Filiano and Kinney and is better known as the ‘Triple Risk Model’. According to this model, SIDS occurs or becomes more likely when several risk factors converge, particularly when a vulnerable baby is exposed to external risk factors during a critical developmental period (5). Although the pathophysiology of sleep-related death is not yet fully understood, the triple risk model can help us to conceptualize SIDS as a complex and multifactorial syndrome. The external factors mentioned in the model refer to several risk factors known to be associated with the child’s immediate environment on the one hand and with parental behaviour on the other (5). Current preventive measures address these risk factors. The American Academy of Pediatrics recommendations (updated in 2022) provide the most evidence-based summary of SIDS prevention (2). Previous research has shown that these guidelines are not yet sufficiently followed or even not known by young parents. In this study, we intend to investigate the knowledge of Flemish mothers about measures to reduce SIDS in newborns and infants.

Materials and methods

Study design

The survey consisted of three parts. In the first part the demographic information (age, education level, parity and living situation) was documented. In the second part of the survey, the parental knowledge of SIDS prevention measures was measured using fourteen true or false

statements. The third part explores the subjective value of different information sources. We included statements that were evidence-based but also statements that have no scientific basis but often circulate on social media. The evidence-based statements were adapted from a validated questionnaire (Rohana et al. 2018) based on the SIDS risk reduction guidelines of the AAP (6). These statements were adapted for a Flemish audience using the appropriate translation-backtranslation method. The non-scientific statements were selected from posts or websites in the context of popular social media. For each of these statements, we also questioned from what source people learned this information: doctor (paediatrician/gynaecologist/family doctor) – other healthcare provider (nurse/midwife) – Kind en Gezin – family and friends – social media. Kind en Gezin (K&G) is a preventive health service for children aged 0-3 years in Flanders. In the final part of the survey, we asked the participants which source of information on the subject they trust most: doctor (paediatrician/gynaecologist/family doctor) – other healthcare provider (nurse/midwife) – K&G – family and friends – social media. This was done on a ranking basis (most reliable to least reliable). After completion of the survey, all participants could access an additional part of the survey that provided feedback on the abovementioned statements with information if that statement was evidence-based or not. To ensure content validity, the survey items were reviewed for their relevance and coverage of the AAP guidelines by a panel of 5 experts. Items were refined according to panel feedback.

The questionnaire was created using the Qualtrics XM program. The IP address of the participants is not stored in this program, so the study was completely anonymous. We investigated the research question "What is the knowledge of Flemish mothers about SIDS risk reduction measures?".

Participants

The survey was distributed via Facebook and through the communication channels of the VVOC (Flemish association for parents of incubated children) in order to also reach the young parent population. To avoid multiple responses within the same household, only mothers were allowed to participate. We excluded women who could not read the questionnaire in Dutch and all incomplete responses. The study was conducted between 26 March 2023 and 22 September 2023 and the self-administered, three – part questionnaire was completed by 201 Flemish mothers. The study protocol was approved by the Research Ethics Committee of KU Leuven (No. MP023085).

Statistical analysis

We performed a descriptive analysis of the responses, and logistic regressions and odds ratios were used in order to investigate the relationship between variables. $P<0.05$ was considered significant. All statistical analyses were performed in IBM SPSS version 29.0.1.0.

Results

Demographics of participants

A total of 201 mothers completed the questionnaire and were included in the study. Of these 89 (44.3%) were aged between 30 and 40 years, 140 (69.7%) had a university degree, 83 (41.3%) had two children and 178 (88.6%) were either married or living with their partner. Table 1 illustrates the remaining maternal demographic details.

Knowledge regarding preventive measures for SIDS

The advisory against employing pillows or other bedding accessories was well-known, as evidenced by 99% of mothers exhibiting familiarity with this recommendation. Furthermore, a notable 95% demonstrated awareness that co-sleeping elevates the susceptibility to SIDS. In relation to sleep practices, it was observed that a majority of participants, constituting 89%, acknowledged the supine position as the most secure sleeping posture for infants.

A noteworthy percentage (88%), comprehended the deleterious impact of exposure to individuals who smoke, recognizing it as a hazard that amplifies the risk of SIDS. The practice of placing toys and stuffed animals in an infant's cot should be deemed hazardous, was not perceived as a risk by a distinct minority, accounting for 25% of participants. Similarly, the potential peril associated with sleeping on a sofa or soft mattress was not adequately recognized by 30% of the participants. Notably, a minority subset demonstrated awareness that breastfeeding serves as a mitigating factor, reducing the risk of SIDS (46%).

Table 1: Demographical characteristics of the study population.

DEMOGRAPHICAL CHARACTERISTICS	N	%
Relationship to the child		
Mother	**201**	**100**
Age of the participants		
20-30y	**46**	**22,9**
30-40y	**89**	**44,3**
>40y	**66**	**32,8**
Education level		
Non-university (High school)	**61**	**30,4**
University (Bachelor's degree/Master/PhD)	**140**	**69,7**
Number of infants		
1	**70**	**34,8**
2	**83**	**41,3**
≥3	**48**	**23,9**
Living/family situation (marital status)		
Cohabiting (married/cohabiting)	**178**	**88,6**
Non-cohabiting (unmarried/divorced)	23	11,4

Table 2: Proportion of correct answers for each question and question number as in the survey with the correct answer in quotation marks.

STATEMENTS (QUESTION NUMBER, CORRECT ANSWER)	ANSWERED CORRECTLY (N)	ANSWERED CORRECTLY (%)
Propping my baby up on a pillow while he/she is sleeping is safe (Q6, False)	**199**	**99,0**
The safest place for my baby to sleep is in the bed with me (Q2, False)	**190**	**94,5**
Placing my baby on his/her back to sleep helps decrease his/her risk of SIDS (Q1, True)	**178**	**88,6**
Being around someone who smokes increases my baby's risk of SIDS (Q3, True)	**177**	**88,1**
Putting toys and stuffed animals in the baby's bed does not increase the risk of SIDS (Q9, False)	**150**	**74,6**
Sleeping on a sofa or soft mattress increases the risk of SIDS (Q8, True)	**141**	**70,2**
Breastfeeding reduces the risk of SIDS (Q4, True)	**92**	**45,8**
Monitor that tracks my baby's heart rate or breathing decreases my baby's risk of SIDS (Q5, False)	**85**	**42,3**
Offering a pacifier for sleep after establishment of breastfeeding is recommended because it reduces the risk of SIDS (Q7, True)	**39**	**19,4**

Additionally, the limited efficacy of monitoring devices, such as those tracking the baby's heart rate or breathing, in preventing the incidence of SIDS was acknowledged by only 42% of the participants. The least known advisory was the fact that offering a pacifier after breastfeeding can be a protective measure (19%). All data are outlined in Table 2.

Figure 1: Histogram of total scores: frequencies of scores in accordance with each score from a total of 9 points, average score = 6.22/9, median = 6/9, std. dev. = 1.454, n = 201.

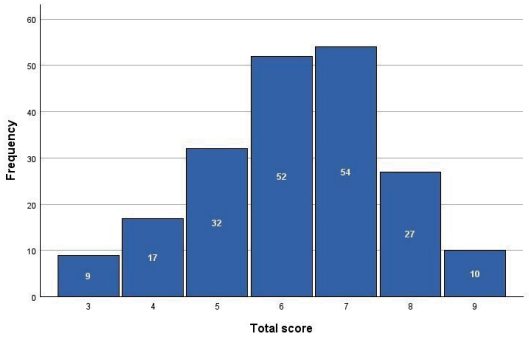


Figure 2: Heatmaps of the percentage of correct answers to each question per subgroup of the statistically significant variables; A. Education level, B. Number of infants.

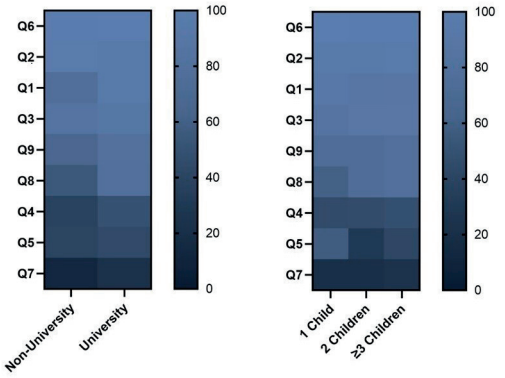
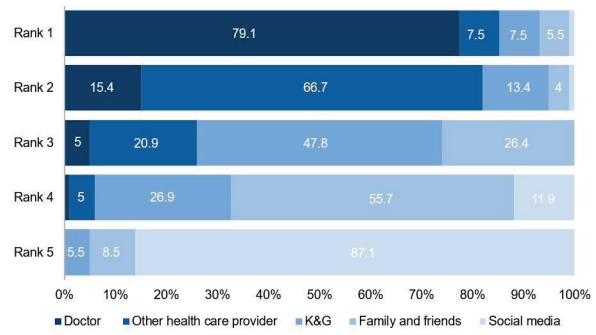


Figure 3: Bar chart ranking most to least reliable source of information according to participants.



Participant characteristics vs SIDS knowledge status

Participants were categorically stratified into two groups based on their responses to the nine evidence-based questions assessing knowledge: those with sufficient knowledge (≥7/9 correct answers) and those with insufficient knowledge (<7/9 correct answers). The mean score across participants was 6.22/9, as illustrated in Figure 1. Notably, 54.7% of individuals were found to have arbitrarily failed the questionnaire. To explore potential determinants of knowledge outcomes, we employed logistic regression, considering variables such as age, educational level, number of infants and marital status. Our analyses revealed a statistically significant association between educational attainment and performance on evidence-based questions ($P<0.001$, OR = 3.194). Specifically, a positive correlation was identified, indicating that a higher level of education was linked to a superior knowledge score. Mothers who went to university were 3.194 times more likely to pass the questionnaire. A significant difference was observed in the number of infants a participant has in passing or failing the questionnaire ($P=0.022$). However, a subgroup analysis shows no significant differences in the subgroups compared to women with one child. Mothers with three or more children exhibited higher survey scores than those with two children ($P = 0.241$, OR = 1.660). In contrast, mothers with two children demonstrated lower scores than mothers with one child ($P = 0.116$, OR = 0.565). Furthermore, we see tendency towards better results in cohabiting women compared with non-cohabiting women ($P = 0.086$, OR = 2.519). Mothers who are married or living with their partner are 2.519 times more likely to pass the survey. There is no influence of age on the pass/fail outcome of the survey. All data are outlined in Table 3. A subgroup analysis showed that participants had difficulties with questions 4,5 and 7. This is independent of the subgroups of statistically significant variables (non-university vs university/one child vs two or ≥ three children) as illustrated in Figure 2. The best-known evidence-based statements were mostly shared or acquired from Kind en Gezin (K&G).

Non-evidence-based statements and source of information

The non-scientific statements were mostly learned from non-professional sources such as social media and family or friends according to the participants themselves. 77 out of 201 mothers (38.3%) learned from social media that a fan above the cot has no effect on SIDS. The non-evidence-based statement that a sound source prevents the baby from falling into a deep sleep and therefore reduces the risk was mainly heard through social media and family/friends, 35.8% and 31.3% respectively. The controversial advice about baby swaddling and its effect on SIDS was also given by other healthcare providers (26.9%), although most respondents had heard about baby swaddling from social media (29.9%). Advice on vaccination and the use of cot bumpers or mattresses was most commonly reported to have been given by Kind en Gezin (K&G), 33.8% and 25.9% respectively, or by other professional caregivers such as doctors (21.9%) and nurses/midwives (17.9%). Table 4 shows the details of the responses.

Reliability of information on cot death

Young mothers have the highest level of confidence (79.1%) in doctors (paediatricians, gynaecologists, general practitioners) when it comes to the accuracy of information on SIDS. Other medical professionals like nurses and midwives follow second. For 47.8% of the participants, the third most trusted source is K&G. Family and friends were ranked 4th with 55.7% of participants. For 87.1% of the mothers surveyed, the media was the least reliable source of information concerning SIDS. Findings are displayed in Figure 3.

Discussion

The level of awareness regarding SIDS risk reduction recommendations among Flemish mothers is encouraging, particularly when juxtaposed with findings from analogous studies conducted in different countries. The average score on the evidence-based part of the questionnaire was 6.22 out of 9 (69.11%). A comparison with the study by Rohana et al. (2018) from which our survey was adapted, reveals a stark contrast, where not even half of the parents provided correct responses to at least 5 out of the 9 questions pertaining to cot death (6). It is conceivable that this knowledge disparity can be attributed, in part to the fact that a very high proportion of participants in our study had a high educational level and in part to differences in socio-economic levels between European and Asian countries. However, analogous European studies, despite sustained awareness campaigns, have produced comparable low results. For instance, a French study administered a questionnaire probing knowledge of SIDS risk factors, yielding an average score of 57.2% (4). In Portugal, merely 8.7% of participants responded accurately to at least 75% of the questions related to cot death risk factors (7). On the other

Table 3: Descriptive results of logistic regression (reference group = odds to pass).

								95% C.I. for EXP (B)	
		B	S.E	Wald	df	Sig.	Exp(B)	Lower	Upper
a									
Age	**20-30y (ref.)**			2.835	2	.242			
	30-40y	.466	.393	1.405	1	.236	1.594	.737	3.447
	< 40y	-.089	.455	.038	1	.845	.915	.375	2.230
Education level	**University vs non-university (ref.)**	1.161	.350	10.979	1	<.001	3.194	1.607	6.347
Number of infants	**1 child**			7.591	2	.022			
	2 children	-.572	.364	2.464	1	.116	.565	.276	1.153
	≥ 3 children	.507	.432	1.376	1	.241	1.660	.712	3.870
Marital status	**Cohabiting vs non-cohabiting (ref.)**	.924	.538	2.950	1	.086	2.519	.878	7.230
	Constant	-1.926	.651	8.747	1	.003	.146		

a. Variable(s) in the Equation

hand, a study by Strömberg et al. in Sweden reported commendable parental adherence to national safe sleeping guidelines (8). It is worth noting that prior research has revealed suboptimal compliance with recommendations from the American Academy of Pediatrics (AAP).

Our primary objective was to assess the knowledge of Flemish mothers on the risk factors associated with a child's environment and parental behaviour. Our findings indicate that, on the whole, mothers exhibit sound awareness of safe sleeping guidelines, with the majority providing correct responses to most of the statements. The use of pillows and other soft objects such as toys and stuffed animals in the infant's cot was deemed hazardous by 99% and 75% respectively. In contrast, in other countries, an alarming rate of positive response to the use of harmful bedding accessories was found. A recent study in Croatia showed that 86% of the infants slept on a pillow or with stuffed animals (9). Similarly, Gemble et al. in France reported that only a third of respondents answered correctly regarding the use of dangerous accessories (4). A study conducted in the Netherlands, which analysed Instagram images to gauge compliance with Dutch safe sleeping advice, found that only 16.8% of the 514 collected images depicted an empty bed devoid of toys, pillows, sleeping nests, or other soft bedding (10). The AAP guidelines advocate for infants to sleep in the same room as their parents but on separate surfaces, reducing the risk of SIDS by as much as 50% (2). On the other hand, a significant proportion of Flemish mothers, approximately 95%, recognized the potential risks associated with co-sleeping. In comparison, bed-sharing practices in other countries paint a less favourable picture: 41% in Croatia (9), 40% in Portugal (7), 19% in France (4), 11.2% in the United States (11) and 7.8% in the Netherlands (12).

Of paramount importance, the recommendation for infants to sleep in the supine position was well comprehended by 89% of Flemish mothers. This figure is heartening, especially when compared to other countries where the supine sleeping position is less commonly identified as a risk factor: 51.4% in Spain (13), 49% in Croatia in 2020 (9), 48.5% in the UK in 2017 (14), 47% in France (4), 43.3% in Portugal (7), 31.25% in Australia in 2001 (15) and 27.6% in the Netherlands (12). These disparities underscore the significance of this particular recommendation. Furthermore, a notable 88% of respondents demonstrated an understanding of the adverse effects of passive smoking on infants, correctly identifying it as a hazard that heightens the risk of SIDS.

Nevertheless, our findings revealed that several protective factors were not well understood. Inquiries regarding the protective effects of breastfeeding and the utilization of a pacifier after breastfeeding is well established were

Table 4: Non evidence-based statements with question number as in the survey and source of information as reported by participants.

SOURCE OF INFORMATION, N (%)					
	Social media	**Family/ friends**	**K&G**	**Other healthcare provider**	**Doctor**
A fan above the cot to promote airflow has no effect (Q3)	77 (38,3)	55 (27,4)	14 (6,9)	47(23,4)	8 (3,9)
A sound source (e.g. music) during sleep prevents my baby from falling into a too deep sleep and therefore reduces the risk of SIDS (Q5)	72 (35,8)	63 (31,3)	22 (10,9)	37 (18,4)	7 (3,5)
Baby swaddling reduces the risk of SIDS (Q2)	60 (29,9)	51 (25,4)	25 (12,4)	54 (26,9)	11 (5,5)
The use of cradle bumpers or mattress supports reduces the risk (Q4)	47 (23,4)	47 (23,4)	52 (25,9)	36 (17,9)	19 (9,5)
Vaccination increases the risk of cot death and should be delayed until after the age of one year (Q1)	26 (12,9)	33 (16,4)	68 (33,8)	30 (14,9)	44 (21,9)

areas where a higher incidence of incorrect responses was observed, indicating the need for special attention in future prevention campaigns. A French study revealed that only 16% of participants were aware that using a pacifier reduces the risk of SIDS and merely 36 % recognized breastfeeding as a protective factor (4). Similarly, in Portugal and Spain, awareness of breastfeeding's ability to reduce the risk of SIDS by up to 50% stood at only 30.2% and 41.3%, respectively (7,13). The AAP acknowledges that although the mechanism is yet unclear, studies have reported a protective effect of pacifiers on the incidence of SIDS (2). A contentious issue in the realm of SIDS risk reduction strategies pertains to the use of commercial devices and home cardiorespiratory monitors (CRM). Although home CRM are used in very specific situations for infants at higher SIDS risk, such as extreme prematurely born infants, their use in the general population is not recommended, as multiple studies have demonstrated. Nevertheless, only 42% of the surveyed individuals acknowledged this recommendation (2,16).

To investigate the factors associated with infant sleep environment knowledge, we examined whether there existed any relationships between knowledge and specific demographic characteristics of the participants. We observed that mothers with a higher level of education exhibited superior knowledge of safe sleep practices. This finding aligns with numerous prior studies that have consistently indicated that lower levels of education are associated with poorer awareness of SIDS prevention measures (14,15,17). Furthermore, our results indicated that mothers who were married or cohabiting with their partners achieved higher scores on the questionnaire, possibly attributed to the collaborative thinking and mutual support of two parents. Additionally, the number of children in the household did not appear to exert a discernible effect. In contrast to some other studies, age did not seem to influence knowledge about safe sleeping practices, although studies by Pease et al. in the UK and Walcott et al. in Georgia demonstrated a positive correlation between increasing age and knowledge scores (14,18). Moreover, our findings corroborate the significance of socio-economic status and ethnicity as influential factors, a notion supported by other research (15,19). The study by Walcott et al. indicates that respondents identifying as white tended to be more likely to practice “back to sleep” and less likely to practice bed sharing than black respondents (18). A 2017 integrative review aimed at elucidating the reasons for parental noncompliance with the “Back to sleep” recommendation. They found that the sources of advice, the child’s comfort and sleep quality, and concerns about the child’s safety (e.g. suffocation) were the most important factors. Non-compliance was notably higher among parents who were single, less educated, of lower income, or of African American descent (20). These findings are consistent with our own observations.

In recent years, a substantial volume of non-scientific information pertaining to the subject has proliferated through popular social media platforms. As anticipated, our observations reveal that social media, along with other non-professional sources such as friends and family, are frequently employed channels for acquiring non-evidence-based information on the topic. Notably, we found that information concerning vaccination and the use of cot bumpers in relation to cot death often emanated from professional sources. This phenomenon may be attributed to parents encountering such content on dubious websites and subsequently seeking clarification from medical professionals. Numerous studies have highlighted social media as the primary source of information for parents who are informed about SIDS. According to the survey conducted by Douglas et al., magazines and television advertisements were among the most frequently accessed sources of information regarding SIDS (15).

This underscores the prevailing uncertainty regarding the accuracy of information disseminated through social media. As Rohana et al. elucidate, in a study utilizing Google to search for information on SIDS and safe sleep habits, more than 50% of the websites yielded either inaccurate or irrelevant information (6). Consequently, there is a compelling case for intensifying efforts to utilize media as a channel for disseminating precise and reliable information. While we acknowledge the indispensability of social media as a communication medium in contemporary society, it is essential to underscore that healthcare providers emerge as the most significant and, as our survey findings indicate, the most trusted role models for young parents. As such, they bear the responsibility of educating and guiding them. To counteract the propagation of inaccurate information, health authorities and organizations dedicated to children's well-being should leverage social media platforms to disseminate authoritative and accurate health-related information.

This study is not without its limitations. Our participant group is definitely a result of selection bias, as our survey exclusively targeted women who possessed the ability to comprehend Dutch in order to complete the questionnaire. Additionally, we were unable to definitively establish the representativeness of our study population in relation to the broader demographic. The possibility of non-representativeness in our sample, characterized by a higher proportion of married, highly educated, and native respondents, could potentially influence the relatively high percentage of correct responses recorded. Moreover as we also recruited through communication channels of the VVOC, several participants can be mothers who had presumably preterm children (cared for in a NICU setting), stayed with their infants probably longer in the hospital, had infants with significant medical problems and could perceive the preventive measures in a different way than mothers of newborns without any medical problem. Furthermore, there can be a participation bias with mothers who did not return the survey, possibly due to a lack of awareness. While the sample size of the survey (n=201) was modest, it was deemed adequate for statistical analyses. It is worth noting that the questionnaire did not encompass all the known risk factors associated with SIDS. Due to practical constraints, certain other well-established measures were excluded from the questionnaire. It is conceivable that a more nuanced response option, such as 'I don't know', could have been included alongside the binary true/false choices. Notably, for questions regarding the sources of information, an option indicating 'never heard of' could have been beneficial, especially given that some statements were rooted in non-scientific content.

Conclusion

In conclusion, the level of awareness regarding safe sleeping recommendations among Flemish mothers is a cause for optimism, especially in comparison to other European countries. Notably, this study represents the first published research in Belgium aimed at assessing knowledge concerning Sudden Infant Death Syndrome (SIDS) prevention measures. Our findings underscore the necessity for the implementation of newly updated recommendations within a revised campaign strategy for Belgium. Emphasis should be placed on promoting the beneficial effects of breastfeeding and the utilization of pacifiers. Furthermore, addressing the limited effectiveness of home cardiorespiratory monitors in preventing SIDS is imperative.

To better educate the newest generation of parents, it would be advantageous to reinforce policies that have been in place for an extended period and enjoy broader recognition. In recent years, social media has emerged as a significant information source on this subject; however, concerns persist regarding the accuracy of the information disseminated through these channels. Nevertheless, medical professionals bear the fundamental responsibility of serving as authoritative sources of information and guiding young parents in their adherence to safe sleeping practices for their newborn children. Educating parents about trustworthy social media platforms for reference purposes can be a constructive measure to counter the spread of inaccurate and non-scientific information.

Targeting specific demographic groups, such as parents from lower socio-economic backgrounds, those with lower levels of education, and single mothers, is essential. Future endeavours aimed at formulating campaign strategies to inform parents about safe sleeping recommendations, with the goal of mitigating the risk factors associated with Sudden Infant Death Syndrome, may draw valuable insights from the findings of this study.

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Conflict of interest statement

The authors declare that there are no conflicts of interest with regards to the acquisition and reporting of the data of the study presented in this manuscript.

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