

Knowledge, Attitude and Practice on Oral Health of Children Among Caregivers Attending Dental Clinics in the Malaysian Armed Forces: A Comparison Between Services

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INTRODUCTION

- Deciduous teeth are important as they influence the eruption of permanent teeth. (1)
- Negligence of oral health in children may lead to diseases of which early childhood caries (ECC) is the most common. (2)
- ECC is a multifactorial disease with an etiology that involves social, economic and biological factors in a complex interaction. (3, 4)
- Studies have highlighted that the oral health-related habits of children are determined by the parents' knowledge on oral health. (5)

INTRODUCTION

- Hence, it is important to assess and improve the knowledge, attitude and practice of parents on the oral health of children as this will contribute towards the prevention of ECC. (1)
- Currently, there is no literature on the knowledge, attitude and practice on the oral health of children among caregivers within the Malaysian Armed Forces (MAF).
- This study was conducted to assess the knowledge, attitude and practice of caregivers on their children's oral health and also to compare these parameters between the services within the MAF.

LITERATURE REVIEW IN BRIEF

Mani et. al. 2010 (6)

Mani et. al. 2012 (2)

Suma Sogi et.
al. 2016 (8)

Togoo et. al.
2017 (9)

LITERATURE REVIEW IN BRIEF

Ashkanani & Al-Sane 2013 (7)

THE OBJECTIVES OF THE STUDY

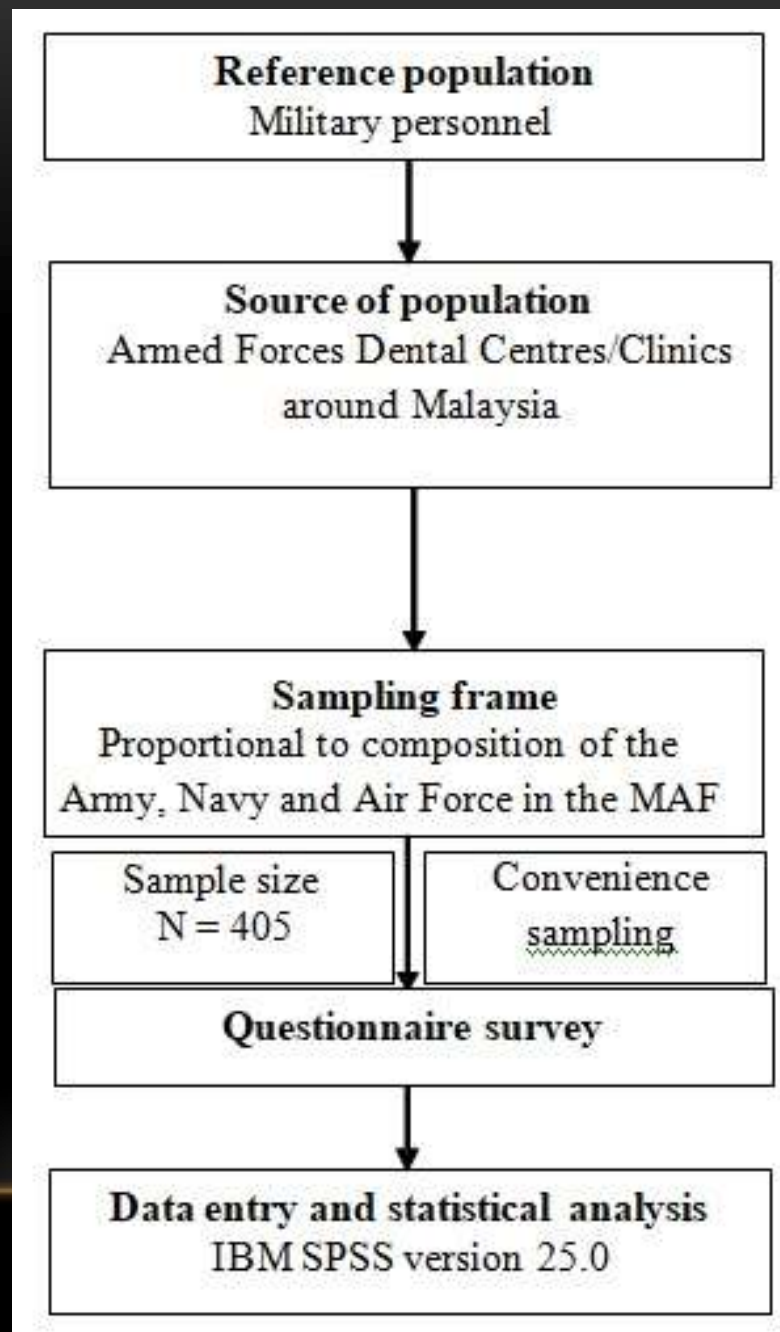
General Objective

- To obtain preliminary data on the knowledge, attitude and practice of caregivers on their children's oral health

Specific Objective

- To compare the knowledge, attitude and practice of caregivers on their children's oral health between the Army, Navy and Air Force within the MAF

SUBJECTS AND METHODS





SHANI ANN MANI

to me ▾

Wed, Feb 5, 1:40 PM



Hi James,

It's always good to hear from a former student. So happy to hear you are doing research in paediatric dentistry. ECC is still a major problem and I hope we are able to help reduce the prevalence.

Attached the questionnaire. Pls acknowledge duly and do not give it to other researchers without permission. Please let me know if you have any questions

With regards,

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* PENAFIAN: E-mel ini dan apa-apa fail yang dikepilkan bersamanya ("Mesej") adalah ditujukan hanya untuk kegunaan penerima(-penerima) yang termaklum di atas dan mungkin mengandungi maklumat sulit. Anda dengan ini dimaklumkan bahawa mengambil apa jua tindakan berdasarkan kepada, membuat penilaian, mengulang hantar, menghebah, mengedar, mencetak, atau menyalin Mesej ini atau sebahagian daripadanya oleh sesiapa selain daripada penerima(-penerima) yang termaklum di atas adalah dilarang. Jika anda telah menerima Mesej ini kerana kesilapan, anda mesti menghapuskan Mesej ini dengan segera dan memaklumkan kepada penghantar Mesej ini menerusi balasan e-mel. Pendapat-pendapat, rumusan-rumusan, dan sebarang maklumat lain di dalam Mesej ini yang tidak berkait dengan urusan rasmi Universiti Malaya adalah difahami sebagai bukan dikeluarkan atau diperakui

RESULTS

Variable	n	(%)
Caregiver's Race		
Malay	371	84.5
Sabah/Sarawak Indigenous Race	61	13.9
Others	7	1.7
Caregiver's Service		
Army	307	69.9
Navy	65	14.8
Airforce	67	15.3
Caregiver's Gender		
Male	345	78.6
Female	94	21.4

Table 1: Socio-demographic characteristics of respondents (n = 439)

Knowledge Questions	Army (%)	Navy (%)	Air Force (%)
Age of tooth decay	65.1	56.9	62.7
Fillings in milk teeth	23.1	18.5	13.4
Cariogenicity of food	96.7	98.5	95.5
Age for using a sipping cup	78.2	87.7	71.6
Cleaning child's mouth after feeding	88.6	90.8	82.1
Brushing is important for oral health	98.0	93.8	97.0
Fluoride prevents tooth decay	86.0	87.7	85.1

Table 2: Percentage of correct answers for knowledge questions according to service

Attitude Questions	Army (%)	Navy (%)	Air Force (%)
Tooth decay is transmissible	35.5	60.0	38.9
Night time feeding causes decay	30.0	56.9	32.9
Frequent and prolonged feeding causes decay	17.3	44.6	28.4
Child's teeth should be cleaned	80.1	89.2	85.1
Children can clean their own teeth effectively	43.9	35.4	50.8
Swallowing toothpaste is harmful	31.3	49.3	31.4
Dental check up before 2 years old	75.5	78.4	80.6
Prolonged pacifier use is harmful	73.0	81.5	79.1

Table 3: Percentage of correct answers for attitude questions according to service

Practice Questions	Army (%)	Navy (%)	Air Force (%)
Chewing child's food before feeding	50.5	38.5	38.8
Mouth examination	25.1	27.7	22.4
Sweet food consumption	11.1	13.8	11.9
Sweetened liquid/juice consumption	10.4	12.3	9.0
Plain water after feeding	40.1	33.8	43.3
Frequency of brushing child's teeth	66.4	46.2	62.7
Use of toothpaste	59.3	46.2	58.2
Use of pacifier dipped into sweet liquid	82.4	67.7	83.6
Efforts to improve dental health knowledge	40.7	58.5	35.8

Table 4: Percentage of correct answers for practice questions according to service

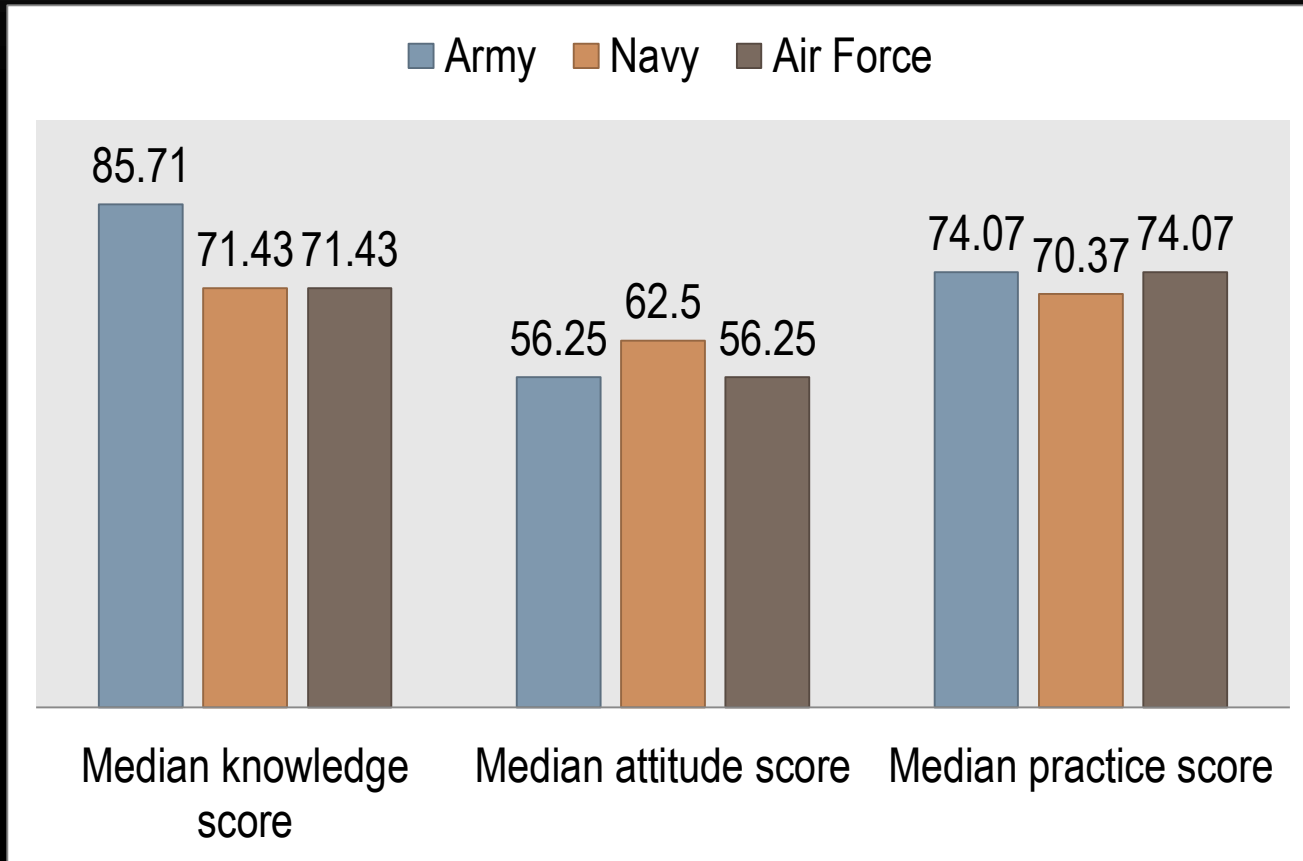
	Knowledge (Range 0-7)	Attitude (Range 0-32)	Practice (Range 0-27)
Army	6.000 (1.00)	18.000 (5.00)	20.000 (4.00)
Navy	5.000 (1.00)	20.000 (8.00)	19.000 (6.00)
Air Force	5.000 (2.00)	18.000 (5.00)	20.000 (4.00)
Chi-square (P)	2.770 (0.250)	21.339 (0.000)	4.946 (0.084)

Table 5: Median and interquartile range (IQR) of knowledge, attitude and practice scores and Chi-square and p-values obtained from Median test analyzing differences between median knowledge, attitude and practice scores of each service respectively

	P
Army-Air Force	1.000
Army-Navy	0.000
Air Force-Navy	0.007

Table 6: Adj. sig p-values obtained from Mann Whitney U test with Bonferroni correction carried out for the three pairs of services when comparing the differences between attitude scores

DISCUSSION



- Good knowledge scores on the oral health of children do not necessarily translate into similarly good attitude and practice scores (2, 9).

Figure 1: Median knowledge, attitude and practice scores of the Army, Navy and Air Force in percentages

DISCUSSION

- These findings are consistent with that of Mani et al. (6), Schroth et al. (10) and Gussy et al. (11). Mani et. Al. (6) attributed this to the fact that caregivers may not be aware of the hidden sugars in milk, or that giving the children bottle or breast feed right before bedtime and immediately once the child has woken up in the night was a common cultural practice in the region.

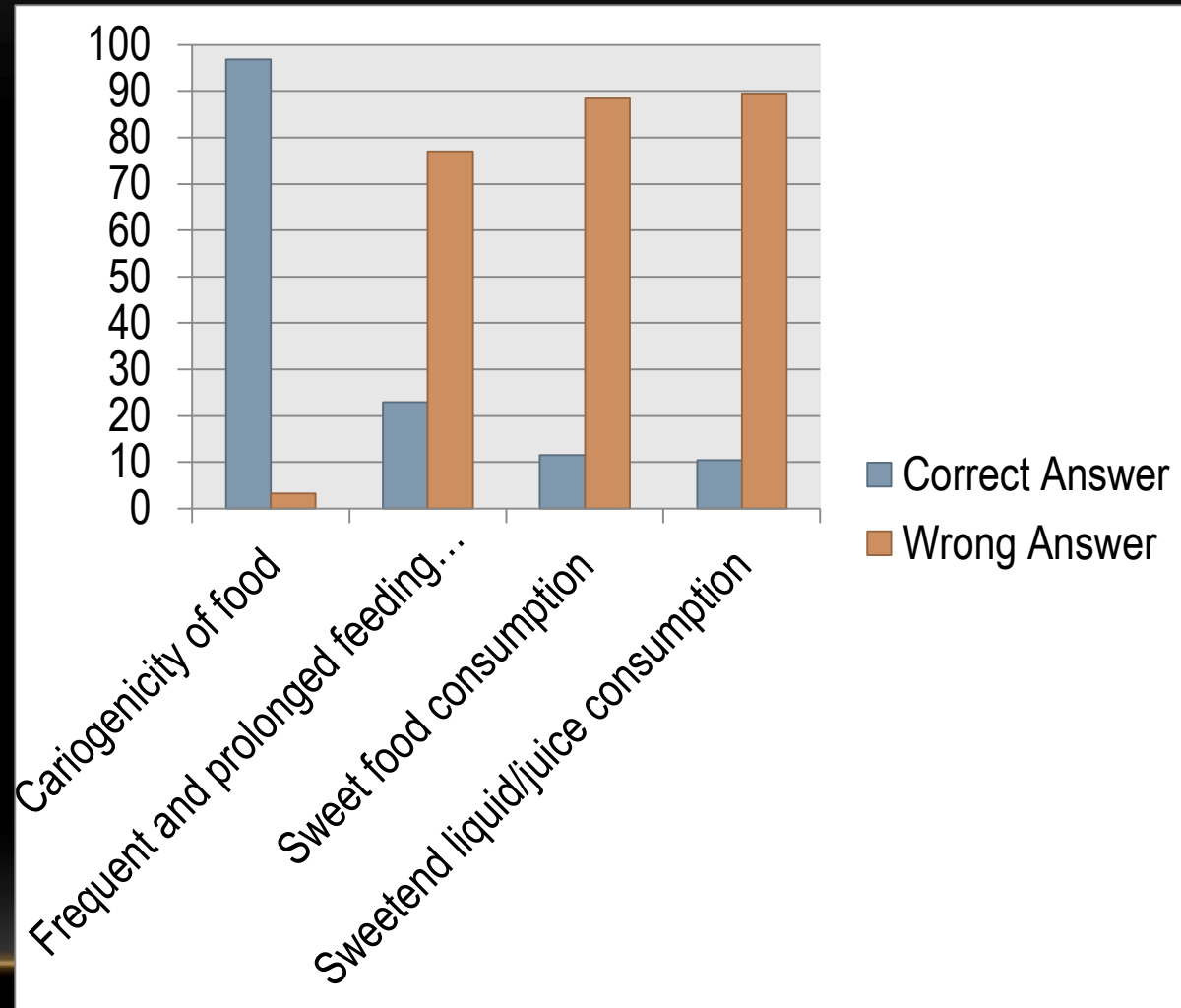


Figure 2: Respondents' answers to selected questions in percentages

DISCUSSION

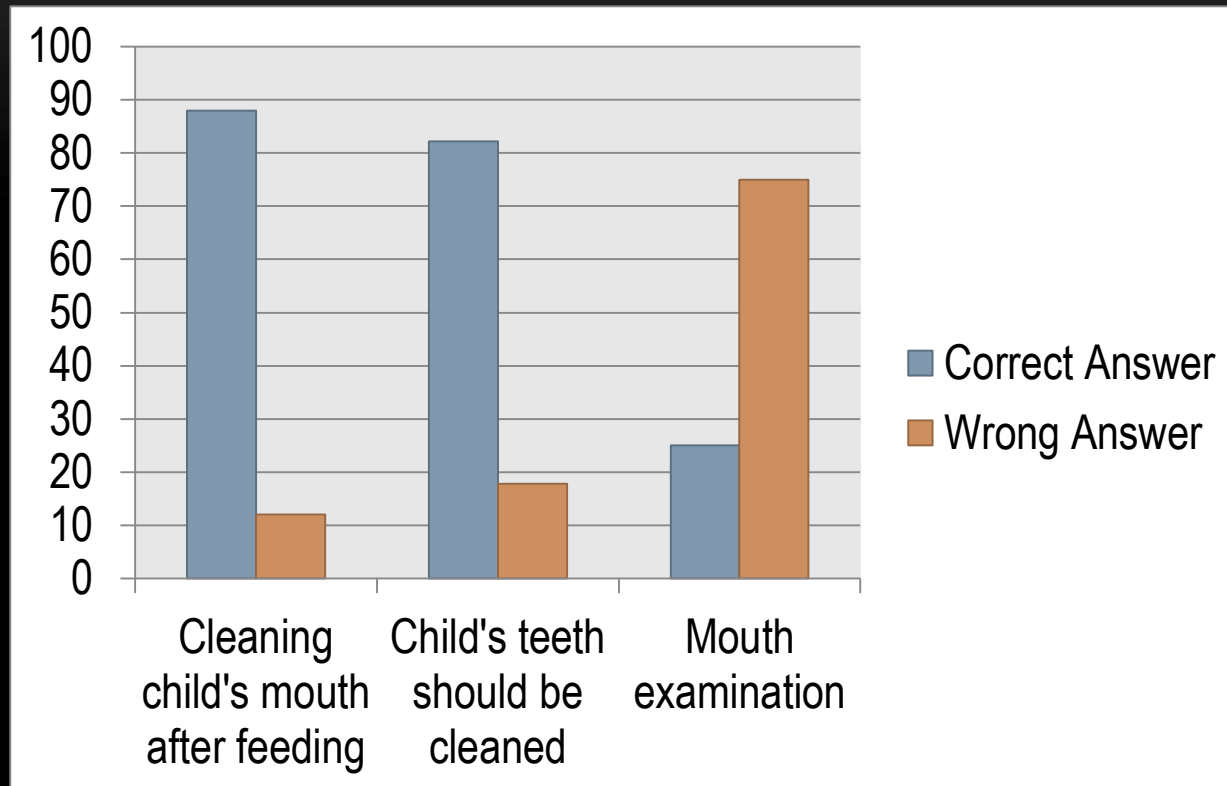


Figure 3: Respondents' answers to selected questions in percentages

- This is in accordance to the studies done by Suma Sogi et al. (8) and Mani et al. (6). Low motivation, low enthusiasm and the lack of practical training could be a result of a poor implementation of knowledge (9).

DISCUSSION

- When comparing between the three services, it was found that respondents from the Navy had significantly better attitude scores than those from the Army and the Air Force.
- This would be in contrast to the findings of a study conducted within the Iranian Armed Force by Khalilazar and Khoshdel (12) that found that personnel from the Navy had greater oral health problems compared to other forces.

DISCUSSION

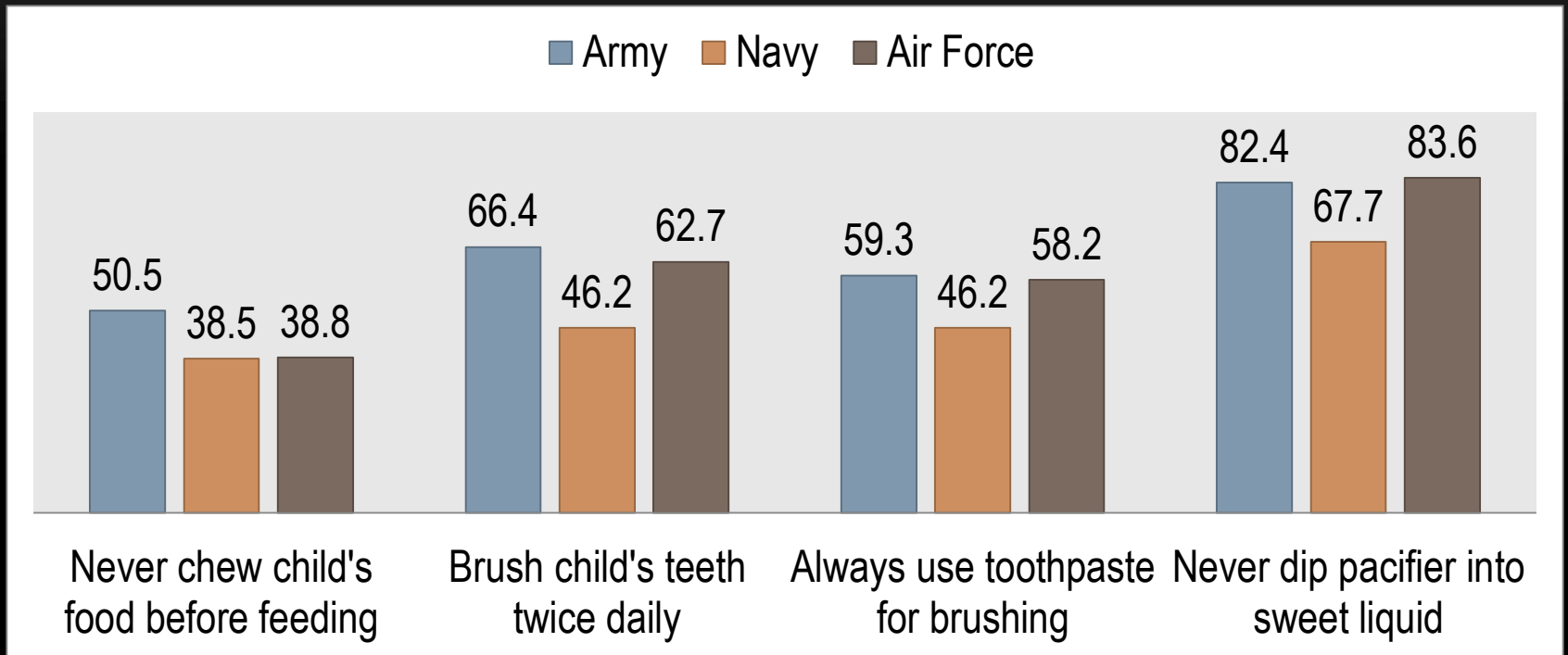


Figure 4: Percentage of correct answers to selected questions by respondents from the Army, Navy and Air Force

- However, these attitudes would once again fail to be translated into positive practices.

DISCUSSION

- Hence, these findings further underline that good knowledge and attitude toward oral health does not necessarily produce good practices (6).
- Earlier findings have suggested that changing health-related behaviours requires more than merely improving knowledge (13- 15).
- Economic, environmental and social factors play a substantial role in shaping people's behaviour and translating knowledge into positive health practices and choices (7).
- One significant limitation of this study was that discrepancies in data collection were likely to occur as the questionnaire was administered at multiple locations by different personnel.

CONCLUSION

- Caregivers in the MAF seemed to have good knowledge but poor attitude and practice on the oral health children.
- While caregivers from the Navy were found to have significantly better attitude than those from the other services, confounding factors were not accounted for in this study.
- The findings still highlight a deficiency in the practice of caregivers on the oral health of children in the MAF.
- As such, steps should be taken to continually reinforce good oral health practices for children among caregivers in the MAF.
- It is recommended that further studies can be conducted to further explore this area of oral health care in the MAF, especially by accounting for potential confounding factors correlating questionnaire surveys to clinical findings.

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THANK YOU