

Knowledge and Attitudes Towards Lesbian/Gay/Bisexual/Transgender Patients among Nursing Officers in Selected Hospitals in Ampara district, Srilanka

Ranawaka N^{1*}; Nanayakkara R¹; Abeysekara CM¹; Welikumbura NH²; Chathurika HLS¹

¹Postgraduate Institute of Medicine, University of Colombo, Sri Lanka.

²Base Hospital - Balapitiya, Sri Lanka.

Corresponding Author: Nithin Ranawaka

Postgraduate Institute of Medicine, University of Colombo, Sri Lanka.

Email: ranawakanithin@yahoo.com

Article information

Received: Oct 25, 2023

Accepted: Dec 15, 2023

Published: Dec 22, 2023

SciBase Epidemiology and Public Health - scibasejournals.org

Ranawaka N et al. © All rights are reserved

Citation: Ranawaka N, Nanayakkara R, Abeysekara CM, Welikumbura NH, Chathurika HLS. Knowledge and Attitudes Towards Lesbian/Gay/Bisexual/Transgender Patients among Nursing Officers in Selected Hospitals in Ampara district, Srilanka. SciBase Epidemiol Public Health. 2023; 1(3): 1011.

Abstract

Introduction: The Lesbian/Gay/Bisexual/Transgender (LGBT) community has a higher rate of mental illnesses, substance abuse, and sexually transmitted diseases. Despite high health needs, few availed to government health services due to fear of being stigmatized and discriminated. Healthcare workers should have good knowledge and attitudes toward the LGBT to reduce stigma and discrimination.

Objective: This study aimed to assess knowledge and attitudes toward LGBT patients among nurses in selected hospitals in Ampara district.

Methods: A descriptive cross-sectional study was conducted. A Self-administered questionnaire was used to collect data from 352 nurses. Data were analyzed using non-parametric tests.

Results: Majority (58.24%) had satisfactory knowledge of LGBT community, though a considerable number of nurses exhibited poor knowledge (32.67%). The percentage of correct answers to knowledge questions varies from 14.2% to 92.6%. Mean value for attitudes was 3.21. Majority (66.4%) of nurses had positive attitudes toward providing healthcare to LGBT, while only 36.8% of nurses had positive attitudes toward acceptance of LGBT. Gender ($p=0.016$), geographical location ($p=0.000$), and education ($p=0.038$) were significantly associated with the knowledge of nurses. Attitudes were significantly associated with education ($p=0.021$).

Conclusions: The mean value of nurses' knowledge and attitudes regarding LGBT patients was just above the neutral level. Nevertheless, there was gross inadequacy of knowledge exhibited in some areas. Though the majority had positive attitudes toward providing health care, LGBT patients may be stigmatized due to poor acceptance by nurses. Therefore, improving nurses' knowledge and attitudes toward LGBT patients is necessary to improve care for them in healthcare institutions.

Keywords: LGBT; Nurses; Knowledge; Attitudes; Lesbian/Gay/Bisexual/Transgender.

Introduction

Sexual orientation and gender identity are two important concepts that need to understand before defining the Lesbian, Gay, Bisexual, and Transgender (LGBT) community. Sexual orientation is defined as "how a person characterizes their sexual and emotional attraction to others" [1]. According to sexual ori-

entation, people can be classified as heterosexual, bisexual, and homosexual (lesbian and gay).

A Lesbian is defined as "A woman who self-identifies as having an emotional, sexual, and/or relational attraction to other women" [2]. A Gay is defined as "A man who self-identifies as having an emotional, sexual, and/or relational attraction to

other men” [2]. A Bisexual is defined as “A person who self-identifies as having an emotional, sexual, and/or relational attraction to men and women” [2]. Gender identity is a “person’s internal sense of being a man/male, woman/female, both, neither, or another gender” [1]. Most of the time, gender identity corresponds with assigned sex at birth. If gender identity and assigned sex do not match each other, they are called transgenders.

LGBT community faces many discriminations and barriers to accessing quality health care, leading to health disparity [3]. They have a higher rate of mental illness (such as anxiety, and depression), substance abuse, Human Immunodeficiency Virus (HIV), and other sexually transmitted diseases (STD). Moreover, they were more victimized by violence [1]. Therefore, they need more support from health care services. According to researchers, a few of them get the benefits of the government health services despite having high health needs [4,5]. For example, in Ethiopia, LGBT population does not seek health care due to fear of homophobic reaction, stigmatization, and discrimination [5]. Therefore, the healthcare workers must have good knowledge and friendly attitude toward the LGBT population to minimize discrimination and stigmatization.

Further, many researchers highlighted the need of improving the knowledge and attitude of the healthcare workers towards LGBT population [6,7]. Therefore, it is essential to assess the level of knowledge and attitudes of healthcare workers to identify the gaps which need to be bridged by necessary interventions. No research was conducted in Sri Lanka to assess the knowledge and attitudes toward the LGBT community among healthcare workers. Nursing officers are the healthcare workers who first meet patients in Sri Lanka hospital settings. They spend more time with patients for nursing care compared to other health categories. Therefore, this research aimed to assess knowledge and attitudes of Nursing officers’ towards LGBT patients in selected hospitals in Ampara district. This research would help identify and correct the knowledge and attitudes gaps among Nursing officers and thereby will reduce the stigma and discrimination towards the LGBT population. Improved health seeking behavior of the LGBT population, will ultimately reduce the rate of mental illnesses, suicidal attempts, substance abuse and spread of HIV and STD.

Ampara district is situated in the Eastern province of Sri Lanka. The total population of Ampara district is 719,462. There are three leading hospitals in Ampara, District General Hospital (DGH) Ampara, Base Hospital Mahaoya, and Base Hospital Dehiattakandiya. DGH Ampara is the district’s largest tertiary health care provider [8]. Therefore, DGH Ampara was selected for the study. Base Hospital Mahaoya was selected from the other two Base Hospitals due to its high feasibility.

Literature review: Sri Lanka is a South Asian country with 21 million inhabitants and LGBT rights have been neglected since the colonial era [9].

Earlier, homosexuality was considered as a mental disorder worldwide, later, it was excluded from mental disorders category [10]. But according to the penal code 365 (A) in Sri Lanka, homosexuality is still considered as a crime. In 2017 Sri Lankan government considered some legislative changes toward the LGBT population, though the project was eventually abandoned [11]. Ministry of Health, Sri Lanka started to issue gender identity certificates for the transgender community since 2016. The process of obtaining a gender identity certificate was men-

tioned in General circular 01-34/2016. It was a huge victory for the transgender population in Sri Lanka.

According to a recent mapping study done in Sri Lanka, there were 9% lesbian, 32% gay, 38% bisexual, and 21% transgender in the Colombo district [12]. Rapid situation assessment done in Sri Lanka on transgenders has revealed that they were treated satisfactorily in healthcare settings/hospitals. However, some have faced verbal and nonverbal harassment in healthcare settings. Further, the same assessment found that transgenders’ psychological stress was very high due to the stigma, discrimination, and violence [13]. It is difficult to find literature on healthcare providers’ attitudes and knowledge toward the LGBT population in Sri Lanka hospital settings. H.U.S. Samaraweera mentioned in her research paper that Sri Lankans have more negative attitudes toward homosexuality, especially lesbianism [14]. Sri Lankan cultural and legal background may be the reason for the lack of research on to LGBT population.

Many types of research have proven the significant association and higher risk of mental disorder, suicidal ideation, substance misuse, and deliberate self-harm in LGBT people than in heterosexual people [15].

Many types of research have been conducted to assess nurses’ and medical officers’ knowledge and attitudes toward the LGBT population in other countries. A survey on healthcare providers’ attitudes and knowledge towards LGBT community suggested the need of additional education and training regarding LGBT to healthcare providers [6]. Another research found that Implicit preferences for heterosexual people versus lesbian and gay people are pervasive among heterosexual healthcare providers [16]. A survey done in the United States on nursing students’ knowledge and attitudes toward LGBT healthcare concerns indicated a significant knowledge deficit [17]. Further, an observational study in Italy also discovered that nurses have moderately positive attitudes toward the LGBT population [7].

Methodology

A descriptive cross-sectional study was conducted in DGH Ampara and Base Hospital Mahaoya in Ampara district from August 2021 to January 2022. Data were collected from all permanent staff Nursing officers in both hospitals using self-administered questionnaire. The questionnaire consisted of three components.

Part A – Assess the Socio-demographic characteristics of nursing officers.

Part B – Assess the knowledge on LGBT population. This section was consisted of 15 questions.

Part C – Assess the attitudes on LGBT population. This section was consisted of 18 questions.

The questionnaire was prepared using Attitudes toward Lesbians and Gay Men (ATLG) scale, Attitudes toward Lesbian, Gay, Bisexual and Transgender Patients (ATLGBTP) scale and Knowledge of Lesbian, Gay, Bisexual, and Transgender People KLGTP questionnaires.

Knowledge questionnaire consisted of three choices with one correct answer. Attitudes questionnaires consisted of 18 questions, scored on a 5-point Likert scale.

Data collection was started after ethical approval and administrative clearance from the relevant authorities. The name

list of nursing officers was obtained from the matron offices in both hospitals. The questionnaire was distributed to nurses and collected after specified time period. Written informed consent was taken before handing over the questionnaire and relevant research information was given to nurses.

Data was entered to excel sheet and then transferred to SPSS. Data entry and analysis was done by the research team.

Results

The main objective of this section of the document is to provide insight into the data that were extracted from the structured questionnaire. Charts and tables were used to present the data in an organized manner along with the interpretation. Under the descriptive data analysis, the mean and the median of the continuous variables were presented and frequency tables were used to present the categorical variables. Descriptive data analysis would provide a guide about the variables. Apart from the demographic variables such as age, gender, education, location, etc, two other variables, the knowledge and attitude were also measured using a series of indicator questions which were assessed by Likert Scale. Some of those questions were presented in positive as well as in negative directions. Before constructing the two composite variables from those different indicator variables, all the questions were re-directed to the positive direction using recodes. In order to assess whether those indicator questions represent the set composite variables (knowledge, attitude), internal reliability was calculated using the Cronbach's Alpha test statistic. The two composite variables were constructed by calculating the mean value of the feedback given to each indicator question by each respondent.

Once the composite variables were constructed, the normality assumptions were assessed for the composite variables and found that both do not follow the normal distribution. That forced the researchers to use the non-parametric tests, Spearman correlation for continuous variables, the Mann-Whitney test for categorical variables with two levels, and the Kruk-Wall test for categorical variables with more than two levels under the inference data analysis part. The statistical significance was assessed against a 95% significant level.

The sub-objective of this section was to assess the level of knowledge (% of the respondent who correctly answered the questions in the field) and attitude (level of attitude under 1 to 5 Liker scale) towards the strength of the respondents, to assess the correlation between Knowledge and attitude with those demographic variables, and to test the significance of such association.

Socio-demographic characteristics of nursing officers: It was observed that the average age of the sampled respondents was 32.33 years, while the median was 29 years. The youngest respondent was 25 years and the oldest respondent was 54 years (Table 1). The average experience of the sampled respondents was five and half years with the median of 3 years. The reported lowest experience was one year and the highest experienced respondent had 21 years of experience (Table 1).

The study sample consisted of 89% females and 11% males. Out of the 352 total sample, 81% of the respondents were married. The majority (71.6%) was diploma holders and 28.4% were degree holders. 60.8% of the respondents were from the Ampara district and 39.2% were residing outside the Ampara district (Table 2).

Assessment of level of knowledge on LGBT patients: The knowledge was measured using fifteen questions with true or false responses. The percentages of correct answers were illustrated in Table 3. According to Table 6, it was found that more than half (56.4%) of the respondents were correct on their feedback. The median was 0.60 and the accuracy of the respondents varied from 27% to 87%. The coefficients of variance of knowledge and attitude were 0.25 and 0.05 respectively, and indicated a very low variance (Table 6).

Distribution of nursing officers according to the level of knowledge: One mark was given to a correct answer and zero mark was given to a wrong answer. Finally, total marks out of 15 marks, converted to the percentage scale. Nurses who obtain ≥ 75 marks were categorized as nurses with "good" knowledge while those who obtained 50 to 75 marks were categorized as satisfactory knowledge. Those who obtained less than 50 marks were categorized as poor knowledge. According to the results, only 9.09% of nurses had good knowledge. A significant proportion of nurses (32.67%) had poor knowledge (Table 4).

Assessment of level of attitudes on LGBT patients: In assessing the attitude of the respondents towards the LGBT patients, they were divided broadly into two directions, namely positive direction and negative direction. In constructing the attitude composite variable, all the indicator questions towards negative direction were recorded in a positive direction (Table 5). The average value for attitudes was 3.206 on the 1 to 5 Likert scale and varied from 2.67 to 3.55 (Table 6).

Correlation analysis between continuous variable and knowledge and attitude: According to Table 7, both normality tests suggested that the two composite variables (knowledge and attitude) did not follow the normal distribution as the corresponding probability values were less than 0.05. Further, the Cronbach's Alpha value of attitude was 0.766 and indicated that the selected fifteen indicator question can be used to construct the attitude composite (Table 8).

The graphical representation (Figure 1) of the correlation between age and knowledge suggested that there was a negative relationship between two variables while there was a positive relationship between age and attitude (Figure 2)

As per Table 8, age was having statistically significant negative correlation as corresponding probability value was less than 0.05. The magnitude of the correlation was weak as it was just below 0.500. The correlation between age and attitude was positive and also statistically significant ($p=0.315$).

Experience also had a negative weak correlation (-0.137) with knowledge, and it was statistically significant as corresponding probability was less than 0.05 (Table 8). On the other hand, experience and attitude had a positive significant correlation but the magnitude of the correlation was weak.

Correlation analysis between categorical variables and knowledge/attitude: Since the distribution of the Knowledge and attitude was not following normal distribution, the non-parametric test of Mann-Whitney was used to access the association.

Table 9 illustrates the levels of association between knowledge and other demographic variables. The average knowledge of the male was 50.7% and female was 57.1%. The difference was statistically significant as the corresponding probability value was less than 0.05(0.016). Therefore, it can conclude that fe-

males tend to have higher knowledge than males. The average knowledge of the married respondent was 56.6%, and unmarried respondents were 55.7%. But this difference was not significant as the probability value was 0.891. Hence it can conclude that marital status did not have any association with knowledge at 95% significance level. The respondents who were from Ampara district had only 51.4% of knowledge while respondents residing outside the Ampara district had 64.2% of knowledge. The statistical test suggested that this was a significant difference as the corresponding probability was less than 0.05. The average knowledge of diploma holders was 55.5% and degree holders were 58.9%. The none-parametric test revealed that it was a significant difference as the probability value was less than 0.05. Hence it can conclude that the higher the education, the higher the knowledge (Table 9).

Table 10 illustrates the association of the attitude with the rest of the demographic variables. Males had a better attitude than females (3.216 vs. 3.544), but the probability value of the test statistic was 0.056, which was not significant (less than 0.05). But there was a significant association of attitude and gender at a 90% significant level as the probability value was less than 0.10. The statistical test revealed that marital status and hometown did not have an association with attitude. The respondents who are having diploma had a better attitude (3.154) than respondents who had a degree (3.116). The statistical test suggested that this difference was statistically significant at a 95% significant level.

Table 1: Age and experience of nurses.

Descriptive statistics	Age	Experience
Mean	32.33	5.51
Median	29	3
Variance	46.884	29.800
Std. Deviation	6.847	5.459
Minimum	25	1
Maximum	54	21

Table 2: Socio-demographic characteristics of nurses (categorical variables).

Categorical variables	Levels	Frequency	Percent
Sex	Male	38	10.8
	Female	314	89.2
Marital Status	Married	286	81.2
	Unmarried	66	18.8
Education	Diploma	252	71.6
	Degree	100	28.4
Home Town	Ampara district	214	60.8
	Not in the Ampara district	138	39.2
Total		352	100.0

Table 3: Frequency table of knowledge.

Knowledge indicators	TRUE		FALSE	
	Count	%	Count	%
• Sex and gender have the same meaning	326	92.60%	26	7.40%
• Do LGBT communities tend to face discrimination to a humiliating, violent?	300	85.20%	52	14.80%
• Bisexual means sexually attracted not exclusively to people of one particular gender; attracted to both men and women	290	82.40%	62	17.60%
• Is intersex the same as transgender?	288	81.80%	64	18.20%
• Do LGBT communities and other sexual minorities are more vulnerable to getting HIV/AIDS?	288	81.80%	64	18.20%
• LGBT community has unique health risks and needs	261	74.10%	91	25.90%
• LGBT is a pathological condition	236	67.00%	116	33.00%
• LGBT people have an increased incidence of anxiety and depression compared to heterosexual men and women	236	67.00%	116	33.00%
• Sexual attraction always should be to the opposite sex	197	56.00%	155	44.00%
• Is there a blood test or biochemical test to tell if someone is lesbian/gay/bisex/transgender?	197	56.00%	155	44.00%
• Bisexuals will eventually “come out” as homosexuals	91	25.90%	261	74.10%
• A majority of homosexuals were seduced in adolescence by a person of the same sex, (usually several years older)	89	25.30%	263	74.70%
• Approximately 25-30% of adolescent boys have a homosexual experience during their teenage year	65	18.50%	287	81.50%
• Approximately 6 -11% of adolescent girls have a homosexual experience during their teenage year	65	18.50%	287	81.50%
• Ministry of Health, Nutrition and Indigenous Medicine in Sri Lanka is Issuing Gender Recognition Certificate for Transgender Community	50	14.20%	302	85.80%

Table 4: Distribution of nursing officers according to the obtain marks for knowledge.

Marks (Out of 100)	Frequency	Percentage (%)
75 or more than 75	32	9.09
50 to 75	205	58.24
Less than 50	115	32.67
Total	352	100.00

Table 5: Frequency table of attitude.

Indicators - attitude	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
• In my hospital, I have witnessed medical officer exhibit attitudes or beliefs about the LGBT population that feel barriers to care.	0.0%	32.4%	67.6%	0.0%	0.0%
• Celebrations such as “Gay Pride Day” are ridiculous because they assume that an individual’s sexual orientation should constitute a source of pride.	0.0%	23.3%	12.0%	64.7%	0.0%
• I would prefer not to treat LGBT patients.	0.0%	92.6%	7.4%	0.0%	0.0%
• LGBT individuals should not be allowed to work with children.	0.0%	47.7%	45.2%	7.1%	0.0%
• LGBT individuals endanger to the society.	0.0%	47.2%	30.1%	15.0%	7.7%
• I think male homosexuals are disgusting	0.0%	25.9%	61.5%	12.6%	0.0%
• LGBT individuals should be barred from the teaching profession.	0.0%	28.7%	45.5%	25.9%	0.0%
• I avoid LGBT individuals whenever possible.	15.9%	31.8%	44.6%	7.6%	0.0%
• LGBT patients deserve the same level of quality care from medical institutions as cisgender patients	0.0%	7.1%	0.0%	89.2%	3.7%
• Homosexuality is merely a different kind of lifestyle that should not be condemned.	0.0%	14.5%	21.9%	63.6%	0.0%
• It would be beneficial to society to recognize LGBT communities as normal.	0.0%	18.2%	36.6%	45.2%	0.0%
• Homosexuals should be allowed to marry	3.5%	26.5%	22.7%	47.2%	0.0%
• LGBT individuals are viable and contributing members of our society.	0.0%	26.5%	18.9%	54.6%	0.0%
• There should be no restriction of rights for LGBT individuals.	0.0%	0.0%	7.1%	92.9%	0.0%
• I would feel comfortable working closely with a LGBT individual.	0.0%	48.9%	36.4%	14.8%	0.0%
• Transgender individuals should be allowed to dress to reflect their gender identity in public.	0.0%	72.4%	19.9%	7.7%	0.0%
• I would feel comfortable if I knew that my best friend was a LGBT individual	0.0%	42.9%	57.1%	0.0%	0.0%
• I would feel comfortable if a close family member is a LGBT individual.	12.0%	23.0%	49.1%	16.0%	0.0%

Table 6: Descriptive statistics of composite variables.

Descriptive of knowledge	Knowledge	Attitude
Mean	0.564	3.206
Median	0.600	3.278
Variance	0.020	0.029
Std. Deviation	0.1423	0.1713
Minimum	0.270	2.670
Maximum	0.870	3.550
Skewness	-0.292	-1.083
Kurtosis	-0.561	2.031

Table 7: Normality test.

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Knowledge	0.233	352	0.00	0.923	352	0.00
Attitude	0.196	352	0.00	0.892	352	0.00

Table 8: Spearman correlation matrix.

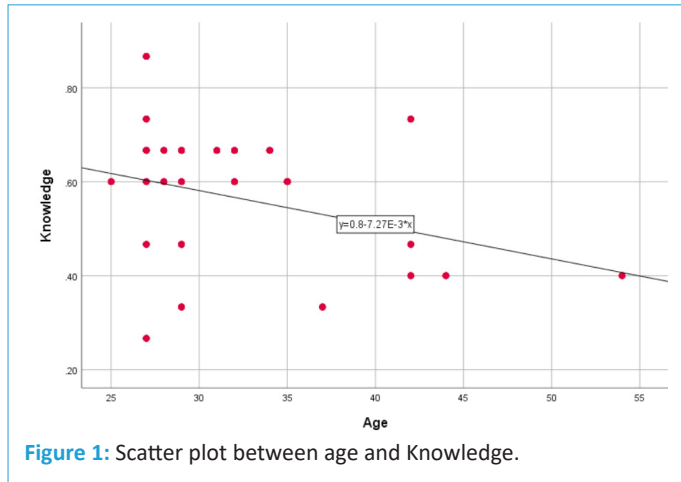
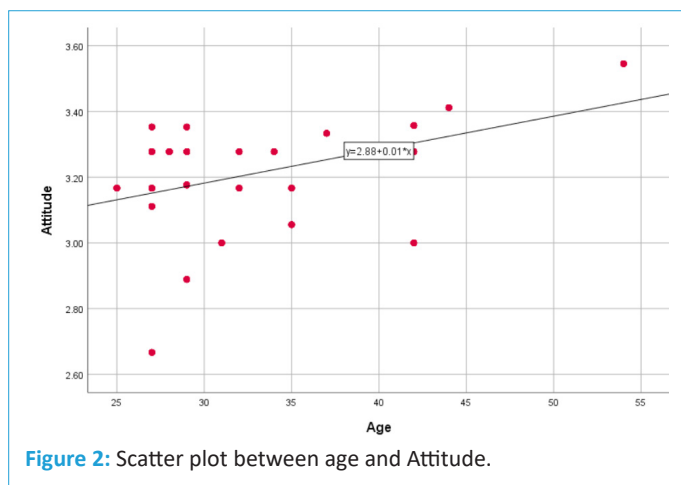
		Knowledge	Attitude
Age	Correlation Coefficient	-.302**	.315**
	Sig. (2-tailed)	0.00	0.00
Experience	Correlation Coefficient	-.137*	.267**
	Sig. (2-tailed)	0.01	0.00
	N	352	352

Table 9: Mann-Whitney test results with knowledge.

Variable	Levels	Mean Knowledge	Mann-Whitney U = statistics	Asymp. Sig. (2-tailed)
Sex	Male	0.507	4,570.00	0.016
	Female	0.571		
Marital status	Married	0.566	9,196.00	0.891
	Unmarried	0.557		
Home Town	Ampara district	0.514	6,581.50	0
	Not in the Ampara district	0.642		
Education	Diploma	0.555	10,852.00	0.038
	Degree	0.589		

Table 10: Mann-Whitney test results with attitude.

Variable	Levels	Mean attitude	Mann-Whitney U = statistics	Asymp. Sig. (2-tailed)
Sex	Male	3.282	4,853.0	0.056
	Female	3.197		
Marital status	Married	3.150	8,549.5	0.303
	Unmarried	3.108		
Home Town	Ampara district	3.149	14,587.5	0.585
	not in the Ampara district	3.134		
Education	Diploma	3.154	10,655.0	0.021
	Degree	3.116		

**Figure 1:** Scatter plot between age and Knowledge.**Figure 2:** Scatter plot between age and Attitude.

Discussion

This study was aimed to identify the knowledge and attitudes of nurses in Ampara district towards the LGBT population. Further, this research assessed the association between nursing officers' socio-demographic characteristics with knowledge and attitudes.

Socio-demographic characteristics of nursing officers' in selected hospitals in Ampara district: There were total of 413 nurses in both hospitals. Among them, 23 nurses who were working on a temporary basis were excluded from the study. 18 Nurses were on maternity leave. A total of 372 nurses were eligible for the study. Among them, 352 responded to the study. The non-responded rate was 5.68%.

Among the study population majority were females (n=314, 89.2%) (Table 2). The male-to-female ratio was 1:9. The male-to-

female ratio of nurses was similar to other countries [18]. Most nurses (n=252, 71.6%) (Table 2) had only a diploma in nursing while the rest had a degree in nursing. Until recent years, there were only diploma courses in nursing in Sri Lanka. This could be the reason for the high number of diploma holders in the study population. A significant proportion of nurses were not from Ampara district (n=138, 39.2%). The mean age of nurses in Ampara district was 32.33 years, and the median was 29. There were no national-level data on nurses in Sri Lanka to compare the age distribution of nurses in Ampara district vs. National level. According to the 2020 national nursing workforce survey in the United States, the median age of nurses was 52 years. It revealed that nurses working in Ampara district were comparatively younger than in other countries [19]. As there was a younger population working in the Ampara district, their mean and median working experience was also low.

Knowledge of nursing officers towards LGBT patients: In this study, knowledge was assessed using 15 questions. Each question had three choices, yes, no, and not sure. Only one choice was considered as the correct answer. Lack of education and knowledge on LGBT community was a factor associated with inadequate care for LGBT patients [20]. The highest percentage (92.6%) of the correct answers was given to the question "Sex and gender have the same meaning". The lowest percentage (14.20%) of correct answers was given to the question "Ministry of Health, Nutrition and Indigenous Medicine in Sri Lanka is issuing Gender Recognition Certificate for Transgender Community". Ministry of Health Sri Lanka started to issue gender recognition certificates to the transgender community since 2016. The Ministry of Health issued a circular (circular number 01-34/2016) on issuing gender recognition certification and guidelines on applying for the certificate. Unfortunately, most nurses were unaware of the gender recognition certificate for the transgender community in Sri Lanka. The mean score nurses recorded was 56.42%. The median value was 60%. According to the result, 9.09% of nurses had good knowledge, 58.24% had satisfactory knowledge, and 32.67% had poor knowledge. Though most nurses have satisfactory knowledge, still a considerable number of nurses (32.67%) had poor knowledge. Most of the researchers around the world revealed the same result on knowledge level of nurses or health care providers regarding LGBT population [6,7,20]. It was hard to find any research which revealed the majority of nurses had a good knowledge of the LGBT population. Some universities integrated LGBT health guild into nurses' curricula to fill deficiencies in knowledge gap [21].

Nursing officers' attitude toward LGBT patients: Attitudes of nurses toward LGBT population assessed using 5-point Likert scale. The attitude varies from 2.67 to 3.55. The mean value of

attitudes was 3.206, which was just above the middle value of the Likert scale. 92.6% of nurses disagreed with the indicator “I would prefer not to treat LGBT patients” and 89.2% agreed with the indicator “LGBT patients deserve the same level of quality care from medical institutions as cisgender patients”. It was revealed that nurses did not ready to compromise care for the patients just because they belong to LGBT category. Though, most of the nurses exposed negative attitudes towards indicators such as “I would feel comfortable working closely with a LGBT individual”, “I would feel comfortable if I knew that my best friend was a LGBT individual”, “I would feel comfortable if a close family member is a LGBT individual”, “Transgender individuals should be allowed to dress to reflect their gender identity in public”, and “Celebrations such as “Gay Pride Day” are ridiculous because they assume that an individual’s sexual orientation should constitute a source of pride”, It was apparent that nurses were unwilling to make friendships or relationships with the LGBT community and did not like expressing LGBTs’ gender identity in public. Therefore, it can be concluded that, as health care workers, nurses do their service provision without discrimination, but generally have a negative attitude toward LGBT community, especially on acceptance of the LGBT community. Attitudes towards LGBT population differed from population to population. Research done in Sweden early as 2004 revealed positive attitudes of nurses towards the gay and lesbian population [22], while a study done in Taiwan, showed negative attitudes toward the LGBT population by nurses [23].

Association of socio-demographic characteristics with knowledge and attitudes of nursing officers toward Lesbian/Gay/Bisexual/Transgender patients: The result of this study revealed that there were significant associations between knowledge of nursing officers and sex ($p=0.016$), geographical location (0.000), and level of education (0.038). Female nurses, Nurses from outside Ampara district, and nurses with nursing degrees had significantly higher knowledge about the LGBT population (Table 10). According to the scatter plot diagram (Figure 5), there was a significant negative correlation between knowledge and age; older nurses showed more negative attitudes. Social media like Facebook, Instagram, and YouTube have more open discussions on LGBT. The younger generation is using these Medias more frequently. This exposure may be the reason for a negative correlation between knowledge and age. It needs more studies to confirm social media’s influence on knowledge and attitudes towards LGBT.

According to the result, only the education level had a significant association with nurses’ attitudes towards the LGBT population ($p=0.021$) (Table 11). The statistical test concluded that nurses with lower education tend to have a better attitude. Regarding gender, even though there was no statistically significant association, the result revealed that males had a better attitude than females (3.216 vs. 3.544). Nurses’ attitudes displayed a significant positive relationship with age, which means nurses’ attitudes towards LGBT increased with age. Many researchers found positive attitudes towards LGBT community with higher education levels [24,25]. However, our study found an inverse relationship between attitudes and education level. There is a concept called “Educationism and the irony of meritocracy” developed by a social psychologist, which means negative attitudes of higher educated people toward the less educated [26]. Likewise, nurses with higher education levels exhibited more negative attitudes towards LGBT community. Differences in curriculum, tutors, and teaching patterns can cause attitudinal differences between degree holders and diploma holders.

It was revealed that increasing knowledge would not change attitudes.

Conclusions

Nurses’ mean value of knowledge and attitudes regarding LGBT patients were just above the average. Nevertheless, there was a gross inadequacy of knowledge exhibited in some areas. Attitudes towards health care provision to LGBT patients were satisfactory though acceptance of LGBT patients as ordinary/normal people was not adequate. Education level showed an inverse association with attitudes towards LGBT people. Therefore, increasing the educational level is not always able to change attitudes.

Nursing officers’ gender ($p=0.016$), geographical location (0.000), and education level (0.038) had a direct impact on knowledge, and educational level had a direct impact on attitudes toward LGBT patients.

Recommendations: It is necessary to improve knowledge and attitude of nurses toward LGBT patients. Hospital managers can arrange educational and training programs for the nurses who are already in the service to improve knowledge and attitude toward LGBT. As the level of education does not correlate with the attitude, special attention should be given to enhancing nurses’ attitudes in more practical ways. Lessons on LGBT community should be included in the nursing curriculum. The idea that “LGBT people are normal human beings” should be embedded in the health care workers’ minds, especially for nurses.

References

1. National LGBT Health Education Center. Understanding the Health Needs of LGBT People. 2016.
2. US. Department of Health and Human Services, Prevention SA and MHSAC for SA. Top Health Issues for LGBT Populations Information & Resource Kit. 2012.
3. Strong KL. Assessing Undergraduate Nursing Students’ Knowledge z, Attitudes and Cultural Competence in Caring for LGBT Patients. Honor Proj. 2013.
4. Muthusamy S. Health and Healthcare Seeking Behaviour Among Transgender in Mumbai: Beyond the Paradigm of HIV/AIDS Health and Healthcare Seeking Behaviour among Transgender in Mumbai: Beyond the Paradigm of HIV/AIDS. 2017; 4
5. Getnet Tadele WKA. Health needs, health care seeking behaviour, and utilization of health services among lesbians , gays and bisexuals in Addis Ababa, Ethiopia. Tadele Amde Int J Equity Heal. 2019; 5: 1-13.
6. Rowe D, Ng YC, Keefe LO, Crawford D. Providers’ Attitudes and Knowledge of Lesbian, Gay, Bisexual, and Transgender Health. Fed Pract. 2017; 10: 28-34.
7. Pelle C Della, Cerratti F, Giovanni P Di, Cipollone F, Cicolini G. Attitudes Towards and Knowledge About Lesbian, Gay, Bisexual, and Transgender Patients Among Italian Nurses : An Observational Study. J Nurs Scholarsh. 2018.
8. District Secretariat Ampara. Annual Performance Report & Accounts 2018. 2018.
9. Chandradasa M. Suicidal ideation in gay adolescents in the context of cultural stigma and criminalized homosexuality in Sri Lanka. Int J Soc Psychiatry. 2019; 65: 83-4.
10. Mundle G, Mahler L, Bhugra D. Homosexuality and Mental Health. Int Rev Psychiatry. 2016; 10: 8-11.

11. Ellawala T. Legitimizing Violences: The 'Gay Rights' NGO and the Disciplining of the Sri Lankan Queer Figure. *J South Asian Dev*. 2019.
12. Jinadasa MP. Mapping and some aspect of Lesbian, Gay, Bisexual and Transgender (LGBT) in Sri Lanka. *Int J Futur Gener Commun Netw*. 2020.
13. Institute for Participatory Interaction in Development (IPID). Rapid Situation Assessment of Transgender Persons in Sri Lanka. 2016.
14. H.U.S. Samaraweera. Attitudes towards Lesbianism in Sri Lankan Context. In: *Attitudes towards Lesbianism in Sri Lankan Context*. 2012.
15. King M, Semlyen J, Tai SS, Killaspy H, Osborn D, Popelyuk D, et al. A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry*. 2008; 17: 1-17.
16. Sabin JA, Riskind RG, Nosek BA. Health Care Providers' Implicit and Explicit Attitudes Toward Lesbian Women and Gay Men. *Am J Public Heal*. 2015; 105(9): 1831-41.
17. Cornelius JB, Carrick J. A Survey of Nursing Students' Knowledge of and Attitudes Toward LGBT Health Care Concerns. *Nurs Educ Perspect*. 2020.
18. Yip Y-C, Yip K-H, Tsui W-K. Exploring the Gender-Related Perceptions of Male Nursing Students in Clinical Placement in the Asian Context: A Qualitative Study. *Nurs Reports*. 2021; 11(4): 881-90.
19. Smiley RA, Ruttinger C, Oliveira CM, Hudson LR, Allgeyer R, Reneau KA, et al. The 2020 National Nursing Workforce Survey. *J Nurs Regul [Internet]*. 2021; 12(1): 4-96.
20. Stewart K, O'Reilly P. Exploring the attitudes, knowledge and beliefs of nurses and midwives of the healthcare needs of the LGBTQ population: An integrative review. *Nurse Educ Today [Internet]*. 2017; 53(2): 67-77.
21. Sherman ADF, Cimino AN, Clark KD, Smith K, Klepper M, Bower KM. LGBTQ+ health education for nurses: An innovative approach to improving nursing curricula. *Nurse Educ Today [Internet]*. 2021; 97: 104698.
22. Rön Dahl G, Innala S, Carlsson M. Nurses' attitudes towards lesbians and gay men. *J Adv Nurs*. 2004; 47(4): 386-92.
23. Lin HC, Lin YC, Chang YP, Lu WH, Yen CF. Attitudes toward homosexuality among nurses in taiwan: Effects of survey year and sociodemographic characteristics. *Int J Environ Res Public Health*. 2021; 18(7).
24. Yen CF, Pan SM, Hou SY, Liu HC, Wu SJ, Yang WC, et al. Attitudes toward gay men and lesbians and related factors among nurses in Southern Taiwan. *Public Health*. 2007; 121(1): 73-9.
25. Todd L. Attitudes toward the LGBT Community in Higher Education. *Spaces Differ An Interdiscip J [Internet]*. 2009; 2(1): 36-47.
26. Kuppens T, Spears R, Manstead ASR, Spruyt B, Easterbrook MJ. Educationism and the irony of meritocracy: Negative attitudes of higher educated people towards the less educated. *J Exp Soc Psychol [Internet]*. 2018;76: 429-47.