Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

Lalam Lilly Grace & Florence Nabushawo Oketcho

Clarke Internationa l University

ABSTRACT

Introduction: The study discovered that the striking level of gender inequality in the nursing profession, is partially influenced by some individual related factors like gender where male are only 26.4%. This striking numerical gender inequality, has positioned the few male especially those at a care giving role, at a more risk of psychological abuses from the patients/attendant, fellow nurses and other health professionals. Patients/attendants wrongly calls them doctors while some of their female counterpart and other health professionals says they are academic failures who have failed to be doctors. This is psychological abuse and gender discrimination in the female dominated profession. For that reason, the study has exposed that some of the youthful male in the profession are suffering the effect of psychological abuse evidenced by them avoiding the nurses' uniform and putting on scrub clothes in order to confuse and meet public expectation of them being doctors. In addition, the 3.7% Muslims is an outstanding religious affiliation disparity in the profession.

Keywords: NA

Classification: NLMC CODE: WB 310

Language: English

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

Lalam Lilly Grace[α] & Florence Nabushawo Oketcho[σ]

ABSTRACT

Introduction: The study discovered that the striking level of gender inequality in the nursing profession, is partially influenced by some individual related factors like gender where male are only 26.4%. This striking numerical gender inequality, has positioned the few male especially those at a care giving role, at a more risk of psychological abuses from the patients/ attendant, fellow nurses and other health professionals. Patients/attendants wrongly calls them doctors while some of their female counterpart and other health professionals says they are academic failures who have failed to be doctors. This is psychological abuse and gender discrimination in the female dominated profession. For that reason, the study has exposed that some of the youthful male in the profession are suffering the effect of psychological abuse evidenced by them avoiding the nurses' uniform and putting on scrub clothes in order to confuse and meet public expectation of them being doctors. In addition, the 3.7% Muslims is an outstanding religious affiliation disparity in the profession.

The 43.3% of the gender discriminated nursing professionals were told that they are academic failures but this study has dismissed that claim. It has confirmed that all the nurses/student nurses has attained the minimum set standards by Uganda Ministry of Education and Sports to professionally train with the main aim of saving life though graduate nurses are still few at only 6%.

The study has unveiled that 9.1% of the nurses have joined the profession because of mistreatment of patients/attendants by some nurses. Much as most of the nurses/student nurses were motivated to join the profession to help the sick, some were for employment opportunity and others because of the nurses dressing code. It has been found that there is a gradual generational mind set change about the profession being a female profession to a gender neutral profession. 78.5% of the respondents proof it by saying they would recommend both gender to join the profession since they are all capable of serving and saving life. But, there is still a mixed feeling about the male in the profession, some nurses and student nurses says they are academic failures, some are using nursing as a stepping stone to their next medical profession while some respondents said that some of the male in nursing are very good, very knowledgeable, hardworking and caring than the female nurses. All these finding justifies individual related factors influencing gender inequality in the nursing profession. The main study objectives was to established the factors influencing gender inequality in the nursing profession among nurses and student nurses from the selected hospital and nurses training institution in the Northern Cities of Uganda. The specific objective was to determine individual related factors influencing Gender inequality in the Nursing Profession among the respondents from the study sites.

Methodology: the study used a cross-sectional study design to obtained quantitative data from

the respondents in Gulu, Lira and Arua Cities. Trained research assistants used a pretested structured English questionnaire to obtain the raw data which were single entered and analyzed using statistical software version Frequency tables and graphs were used to describe the study variables. Univaraite and bivariate analysis methods were used to identify factors associated with gender inequality. Variables with P-value of <0.05 with 95% confidence interval were used to declare statistical significance.

Results: 383 participants were interviewed generating 95.6% responses. 4.4% non-responses were due to various reasons which doesn't affect result. Most of the respondent who had experienced gender discrimination, 34.2% were from patients/attendants and 26.3% were from fellow nurses/students. 35.5% of the respondents think some of the male nurses are using nursing as a stepping stone to being doctors. Gender (x^2- 10.294, p-value 0.001), level of education (x^2- 6.293, p-value 0.043), religious affiliation (x^2- 8.296, p-value 0.004), level of program of training (x^2- 10.453, p –value 0.015), experience of discrimination (x^2- 4.360, p- value 0.0037) and gender to recommend for nursing profession (x^2 - 6.024, p-value 0.049) were some of the individual related factors which were significantly associated to gender inequality in the nursing profession.

Conclusion: gender inequality affecting nursing profession is greatly influenced by individual related factors though other factors may also be contributing. Other than gender itself, there is striking numerical religious inequality with Muslim being the marginalised group.

Patients/attendants, other health professionals and nurses themselves are the perpetuator of gender discrimination in the profession. Some of the impact of the discrimination is revealed in most of the stigmatised youthful male at a care giving role. They are avoiding the nurses' professional uniform to confuse and meet the public expectation of them being doctors. Parents and other relatives do greatly influenced the decision of a child to be a nurse for job security.

Unprofessional conduct of some nurses on patients/attendants is a negative motivating factor for some individual to join the profession. The gradual generational mind set change about nursing being a female profession to a gender neutral profession need to be accelerated.

Recommendation: Swift action is needed from International and Non-Governmental Organizations, Government Ministries, Nurses and Midwives councils, National Nurses and Midwives Organizations as well Religious leaders for a comprehensive and collaborative effort in mind set change of the public. More research; evidenced based policy change and development; effective implementation strategies and monitoring the implementation process in order to bridge the gaps of gender equality and save the nursing profession from the unfairness which at the end impact on the patient.

Author: Clarke Internationa l University, Uganda. email: lalamlillygrace@gmail.com

I. BACKGROUND OF THE STUDY

Gender is economic, social and cultural attributes and opportunities which determines what is expected, allowed and valued in a woman or a man (jhpiego, 2020).Gender equality is a condition of equal rights, responsibilities and opportunities for all genders. Gender inequality is therefore a social process where men and women are treated differently by having special consideration for one gender. According to declaration of Philadelphia, all human beings irrespective of race, faith or sex; have the right to obtain material wellbeing and spiritual development in conditions of freedom and dignity, economic security and equal opportunity (Press, 2021). WHO in the 49th World Health Assembly, recognized the potential of Nurses to quality and effective Health services and suggested that nurses must be involved at all level of Health System. (Sharrif & Potggieter, 2012).

According to Sunday Summer, gender inequality in nursing profession is numerically distinct with female being predominant and their handling reflects the way women are treated in the society

London Journal of Medical and Health Research

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

50 Volume 22 | Issue 13 | Compilation 1.0

© 2022 London Journals Press

(Summer, 2017). Media portrays them feminine stereotypes like low skilled handmaiden, sex objects, angels or battle axes and the male are gender stereotyped as gay or weak. (Summer, 2017).Nursing profession is the biggest and fastest growing employment sectors globally for women with about 234 million workers (WHO, 2019). According to the state of the world's Nursing report, Globally nurses are the largest group of health care worker contributing 28 million health work force based on data collected from 191 Countries (WHO, 2020).The report also indicated that 90% of nurses are female and the omission of data about entry salaries, investment in nursing education and gender wage gap is indicator of gender inequality in the profession.

Rosemary Morgan, assistant scientist at Johns Hopkins Bloomberg School of Public Health and School of Nursing said that nurses are discriminated at workplace on the basis of identity. With the Covide19 pandemic, gender inequality at work place has put female nurses at more risk than the male nurses with 73% of the health workers infected in the United State were the female nurses because of their employment position at a care giving roles.

In Africa, 76% of nurses are women and the global gender inequality in Nursing has allowed the profession to follow a stereotype where in low and middle income countries; Nursing is considered second choice for those that have fail to make it to their preferred profession while in developed countries the low rate of men in Nursing is an indicator of how nursing is viewed globally said Emily Katarikawe, Uganda country Director of Jhpiego (WHO, 2020). There is also a large pay gap between the men and female in Nursing Profession where men are at the higher paying leadership position while the female are at the lower paying roles as stated by Michelle McIsaac, an Economist at WHO (WHO, 2020).

In Uganda, most Nurses are female though men are joining the profession. According to the study done in Mbarara Regional Referral Hospital, male nurses are seen as misplaced, misunderstood as practitioners from other discipline and are mistreated by the colleagues of the profession or other health care workers (Susan, 2016).

In Northern Uganda, there is no evidence of any similar study conducted as well in Gulu, Lira and Arua Cities, yet gender inequality affects the profession at all level of service delivery.

The specific objectives of the study was to assess the individual related factors influencing gender inequality in the nursing profession.

II.   METHODOLOGY

The study methodology is the same as in the previous article, "the striking level of gender inequality in the nursing profession, a cross sectional study of selected hospitals and nurses training institution in the northern cities of Uganda".

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

III. RESULTS

Individual related factors influencing gender inequality in the nursing profession.

Table 3: Univariate analysis of individual related factors influencing gender inequality in the nursing profession

Variables	Category	Frequency N	Percentage %
Institutions	Hospital Nurse training institution	182 170	51.7 48.3
Gender	Female Male	259 93	73.6 26.4
Age	18-24 years 25-34 years 35-44 years >44 years	187 109 29 27	53.1 31.0 8.2 7.7
Highest level of education attained?	Post graduate/Bachelor Tertiary Secondary	21 178 153	6.0 50.6 43.5
Preferred course after secondary level of education	Nursing Medicine (Doctors). Engineering Others	171 96 46 39	48.6 27.3 13.1 11.1
Religion affiliation	Christian Muslim	339 13	96.3 3.7
Marital status	Single married	216 136	61.4 38.6
Level of program	Post graduate in nursing Bachelor of nursing science Diploma in nursing Certificate in nursing	13 49 278 12	3.7 13.9 79.0 3.4
Person who decided for you to be a nurse	No one My parents My friends/relatives/My teachers	205 97 50	58.2 27.6 14.2
Motivation factors to join nursing profession	Helping the sick Employment opportunity. Dressing code. Mistreatment of patients/attendants by some nurses. Others	167 72 61 32 20	47.4 20.5 17.3 9.1 5.7
experienced any of form of discrimination because of your gender	Yes No	49 303	13.9 86
Thought of the men in the nursing profession	Are academic failures.	84	23.9
	Most of them are using nursing as a stepping stone that is why they don't like being a nurse but want to be doctors.	125	35.5
	Some are very good, very knowledgeable, hardworking and caring than the female nurses.	91	25.9

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

52   Volume 22 | Issue 13 | Compilation 1.0   © 2022 London Journals Press

	Others	52	14.8
Recommending any gender to join the nursing profession	Yes No	312 40	88.6 11.4
Gender would recommend	Male Female Both male and female	9 58 245	2.9 18.6 78.5
Gender would recommend	Male Female Both male and female.	9 58 245	2.9 18.6 78.5
Reason for recommending the particular gender	Female are fit to be nurses and more Committed Male are not fit to be nurses, they should be doctors. A profession for both gender, all are capable of serving and saving life. Promotion of gender equality Others	47 104 115 40 6	13.4 29.5 32.7 11.4 1.7

According to table 1 above, 51.7% of the respondents were from hospital, 48.6% preferred nursing at their secondary level choice, and 79% had diploma in nursing, 58.2% decided for themselves about the course, 47.4% were motivated for the passion for helping the sick, 86.1 had not experienced any form of discrimination in the nursing profession, 35.5% of the respondents think male nurses are using nursing as a stepping stone that is why they don't like being a nurse but want to be doctors, 88.6% would recommend any gender for nursing professions, of those 78.5% would recommend both gender and 32.7% would do so because nursing is profession for both gender, all are capable of serving and saving life.
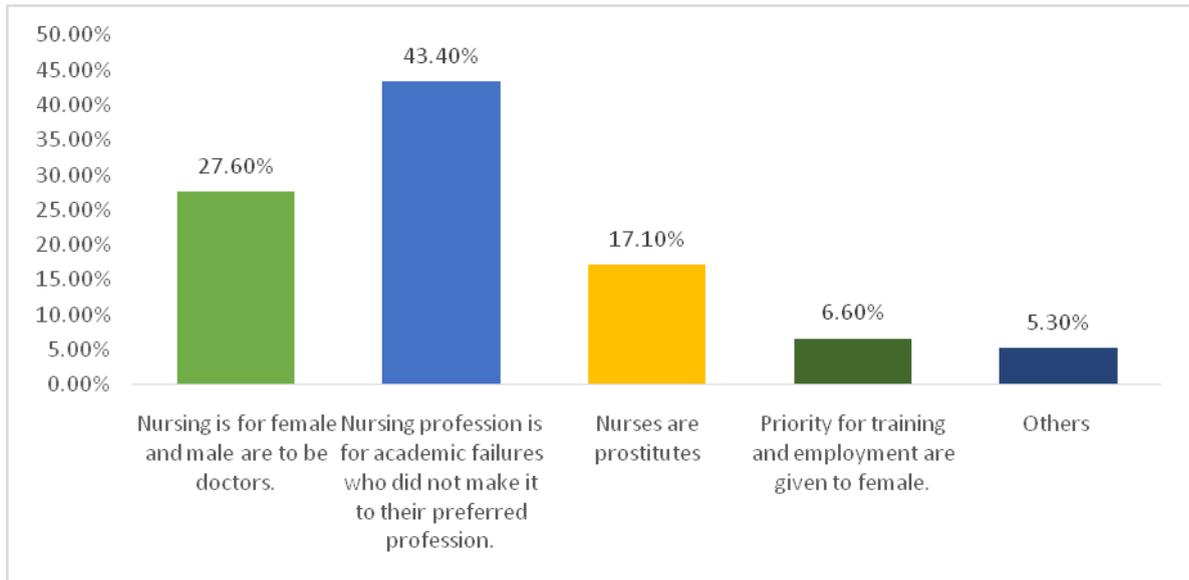
Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

© 2022 London Journals Press Volume 22 | Issue 13 | Compilation 1.0 53

Figure 3: Showing the description of form of discrimination

On the discrimination, most of the respondents 43.4% were told nursing profession is for academic failures who did not make it to their preferred professions and more details are presented in figure 1 above
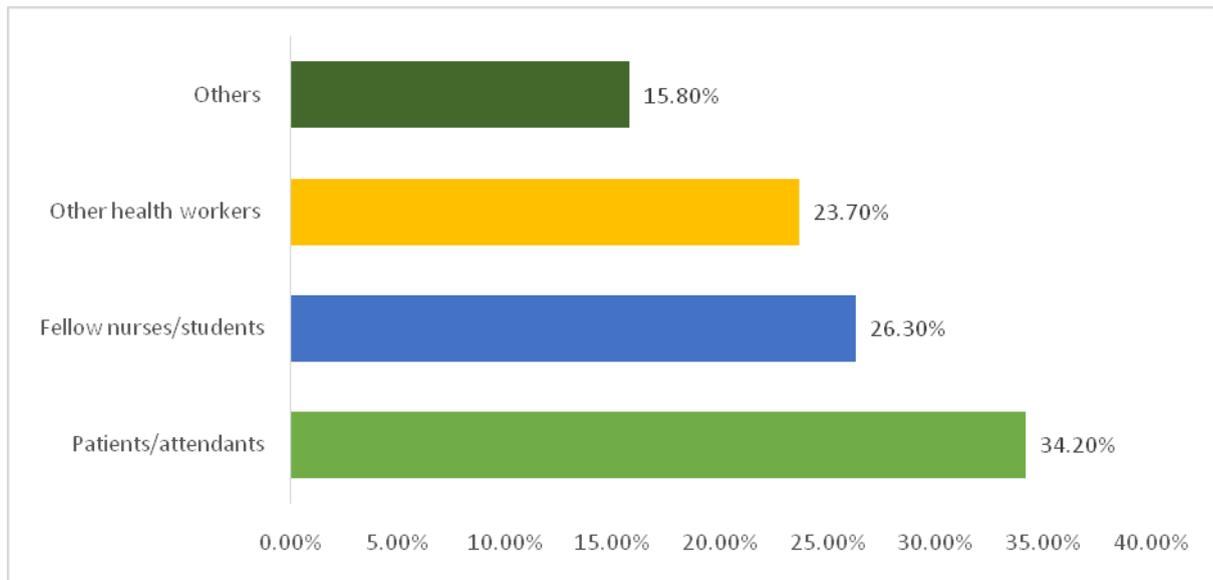

Figure 4: People who are perpetuator of the discrimination

Most of the respondent who had experienced discrimination, 34.2% were from patients/attendants, 26.3% were from fellow nurses/students.

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

54   Volume 22 | Issue 13 | Compilation 1.0   © 2022 London Journals Press

Variables	Category	Present (%)	Absent (%)	$x2$	p- value
Institutions	Hospital Nurse training institution	44(57.9%) 32(42.1%)	138(50.0%) 138(50.0%)	1.487	0.223
Gender	Female Male	45(59.2%) 31(40.8%)	214(77.5%) 62(22.5)	10.294	0.001
Age	18-24 years 25-34 years 35-44 years >44 years	32(42.1%) 28(36.8%) 8(10.5%) 8(10.5%)	155(56.2%) 81(29.3%) 21(7.6%) 19(6.9%)	4.943	0.176
Highest level of education attained?	Post graduate/Bachelor Tertiary Secondary	7(9.2%) 45(59.2%) 24(31.6%)	14(5.1%) 133(48.2%) 129(46.7%)	6.293	0.043
Preferred course after secondary	Nursing Medicine (Doctors) Engineering Others	37(48.7%) 18(23.7%) 13(17.1%) 8(10.5)	134(48.6%) 78(28.3%) 33(12.0%) 31(11.2)	1.693	0.638
Tribes	Acholi/langi/Alur Lugbara/Madi/Kakwa Bantu Other	37(48.7%) 19(25.0%) 8(10.5%) 12(15.8%)	146(52.9%) 58(21.0%) 42(15.2%) 30(10.9%)	2.768	0.429
Religion affiliation	Christian Muslim	69(90.8%) 7(9.2%)	270(97.8%) 6(2.2%)	8.296	0.004
Marital status	Single Married	43 (56.6%) 33 (43.4%)	173 (62.7%) 103 (37.3%)	0.936	0.333
Level of program	Post graduate in nursing Bachelor of nursing science Diploma in nursing Certificate in nursing	4(5.3%) 15(19.7%) 51(67.1%) 6(7.9%)	9(3.3%) 34(12.3%) 227(82.2%) 6(2.2%)	10.453	0.015
Person who decided for you to be a nurse	No one My parents My friends/relatives/My teachers	44(57.9%) 19(25.0%) 13(17.1%)	161(58.3%) 78(28.3%) 37(13.4%)	0.806	0.668
Motivation factors to join nursing profession	Helping the sick Employment opportunity Dressing code Mistreatment of patients/attendants by some nurses Others	42(55.3%) 12(15.8%) 14(18.4%) 4(5.3%) 4(5.3%)	125(47.4%) 60(21.7%) 47(17.0%) 28(10.1%) 16(5.8)	3.939	0.414
Experienced of any form discrimination because of one gender	Yes No	5(6.5%) 71(93.4%)	44(14.9%) 232(84.1%)	4.360	0.037
Thought of the men in the nursing profession	Are academic failures Most of them are using nursing as a stepping stone that is why they don't like being a nurse but want to be doctors Some are very good, knowledgeable, hardworking and caring than the female nurses	17(22.4%) 25(32.9%) 21(27.6%)	67(24.3%) 100(36.2%) 70(25.4%)	0.752	0.861

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

© 2022 London Journals Press   Volume 22 | Issue 13 | Compilation 1.0   55

London Journal of Medical and Health Research

	Others	13(17.1%)	39(15.1%)		
Recommending any gender to join the nursing Profession?	Yes No	69(90.8%) 7(9.2%)	243(88.0%) 33(12.0%)	0.446	0.504
Gender one would recommend	Male Female Both male and female.	5(7.2%) 12(17.4%) 52(75.4%)	4(1.6%) 46(18.9%) 193(79.4%)	6.024	0.049
Reason for recommending the particular gender	Female are fit to be nurses and more committed Male are not fit to be nurses, they should be doctors A profession for both gender, all are Capable of serving and saving life Promotion of gender equality Others	7(9.2%) 14(18.4%) 13(17.1%) 29(38.2%) 12(15.8%)	33(12.0%) 91(33.0%) 86(31.2%) 28(10.1%) 5(1.8%)	9.988	0.076

Most of the respondent who had experienced discrimination, 34.2% were from patients/attendants, 26.3% were from fellow nurses/student

Among the individual factors, Gender (x^2- 10.294, p-value 0.001), level of education (x^2- 6.293, p-value 0.043), religious affiliation (x^2- 8.296, p-value 0.004), level of program of training (x^2- 10.453, p –value 0.015), experience of discrimination (x^2- 4.360, p-value 0.0037) and gender to recommend for nursing profession (x^2 - 6.024, p-value 0.049) were significantly associated to gender inequality in the nursing profession.

IV.   DISCUSSION

Individual related factors

The study found that gender; religious affiliation; level of education attained; level of educational training; experience of gender discrimination and gender to recommend for nursing courses were some of the individual related factors that are significantly associated with gender inequality in the nursing profession (NP).

In addition, it noted that there is only 26.4% male, possibly because the minimal increase in gender depiction over time in the NP, has not yet caused a numerical gender balance globally as reported by different researchers. Female nurses globally and Africa are at 90% and 76% respectively (WHO, 2020). From the study, we renowned that the stereotype that Nursing is a female Profession is still prevailing among the Ugandan nurses/student nurses and the community. This is in line with Twomey, (2011) who found that this stereotype has reduced the number of males interested in the profession. The few male nurses have had problems of professional acceptance just as Susan (2014) stated in her report. The general society, their families and even some of the female counterparts isolate them from the female nurses and profession work group which is not any different from some male nurses' experiences in this study. Though majority of the male in the profession are called doctors by patients/ attendants, implying that they are not expected to be nurses, even most of the fellow nurses says they are not fit to be nurses but should be doctors.

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

56   Volume 22 | Issue 13 | Compilation 1.0   © 2022 London Journals Press

This is psychological abuse and stigmatization of the male in the profession. Due to that, it has been exposed that most of the youthful male in the NP are stigmatized evidenced by their unprofessional dressing code when on duty. This was observed in all most all the hospitals but more marked in the RRH where most male prefer scrub or a half scrub clothes to nurses' professional uniform especially at a care giving role to hide their nurses identity, perhaps to confuse and meet public expectation of them being doctors. One of SPNO lamented that the unprofessional dressing code of male nurses on duty are getting out of hands. Patients/ attendance confused them for Doctors as well giving most of the female nurses a negative impression about them that they are in the wrong profession. This behaviour has direct impact on the patients nursing care and health improvement due to the divided attitudes.

Furthermore, some male nurses have confirmed the allegation by some nurses that they use the profession as a stepping stone for other medical courses. This has built on Emily Katarikawe, Uganda Country Director of Jhpiego remark, that nursing is considered second choice when first choice fail (WHO, 2020). The study discovered that majority of nurses 58.2%, choose it at O' level (senior four). At A' level (senior six), most students undertaking science subjects have preferred to be doctors or engineers but get back to nursing at a certificate level if they fail to score the university minimum set points. From the study, 58.2% majority of nurses made their decision to join the profession. 47.4% had passion to help the sick though others were because of job security and nurses dressing code. But, the study has exposed that a minority of 9.1% were motivated because of the unprofessional conduct of mistreating patients/attendants by some nurses. Possibly, the nurses who are claimed to have mistreated patients/attendants, their choices of the profession were influenced by their parents, relatives and friends or their motivating factors for nursing was not serving and saving life. Also, one of the SPNO from a RRH stated that some of male where possibly forced by their parents to be nurses because of the surety of jobs

after completion of training because some of their unprofessional behaviour when on duty. Not only that but also, the outstanding numerical religious affiliation inequality indicates that Muslims are only 3.7% in the nursing profession possibly because of the dos and don'ts in the Islamic religion that needs more research to detail it out.

To continue, the study uncovered that both male and female nurses are experiencing gender discrimination from all directions i.e. patients/ attendants, other health professional, fellow nurses/student nurses and even their family and friends though Summer (2017) noted only male nurses experiences of conflicting images. In our finding it was realized that both male and female in the profession experience conflicting images where some are appreciated for being loving, caring, hardworking, smart intellectually and easy to approach while others are rude, proud, arrogant, lazy, fulfilling personal interest, academic failures, misplaced and practitioners of other discipline. Just like the female counter part, some of the male had the passion of being nurses.

Naturally men are stronger emotionally than the female which is of an advantage to the patients.

Bradon *et al,* 2021 in their findings indicated that the few men in the profession use it as double edge sword for senior nursing position and higher salaries concurrently but the study has differed from them. Most of the managers reported no salary difference and promotions are based on academic qualification and experience for both gender. On observation, it was noted that there is gender imbalances even at higher nurses position where all most all the SPNO were female justifying Brody findings where it was stated that the imbalance gender proportion at jobs position has remained a key issues in health sectors (Brody, 2019) Bradon and team explained that men still experience gender stereotyping, prejudice and discrimination even at higher position.

Majority of the discriminated respondents were told that nursing profession is for academic failures who did not make it to their preferred professions but according to the students

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

© 2022 London Journals Press

Volume 22 | Issue 13 | Compilation 1.0

57

nurses/nurses and the managers of all the study institutions, they have said that for one to be admitted for training as a certificate nurse, the lowest cadre in Uganda, you must have a Uganda certificate of education with good passes in Biology, mathematic, chemistry, English and physics.

The study unveiled that the nursing profession in Uganda still has very few graduate nurses may be most of them join NGO's after completion since the government had no salary scale hence no employments for them until of recent when it was sorted out. This finding therefore dismiss the claim by some people that nursing profession is for academic failures. Of the students interviewed, 79% were upgrading from certificate to a diploma level, showing the trend in which the profession is going.

In the current transitions in nursing profession, most of the respondents confirmed that they would recommend someone to join the profession. 88.6% said they would recommend any gender because they are fit to be nurses and more committed especially the female. Of those, 78.5% said they would recommend both gender to promote gender equality showing that the new generation in NP are realizing the importance of gender equality in the provision of nursing care and 32.7% would do so because nursing is profession for both gender and all are capable of serving and saving life. The outcomes of the study has confirmed Judie and Jayapal report of 2020 about the transformation ideology of nursing from female profession to gender neutral profession. Hence, supporting the achievement of SDG 4 (four) that aims at ensuring, inclusive and equitable quality education and promoting lifelong learning opportunity for all.

V. CONCLUSION

The individual related factors are greatly and collectively contributing to gender inequality in the nursing profession though other factors may be contributing.

VI. RECOMMENDATION

1. A comprehensive approach to effective and efficient individual mind-set change should be used. Governments; Nurses and Midwives Council (NMC); National Nurses and Midwives Organizations and religious leaders should developed and lead a standard programs for Public and professional campaign awareness about nursing as a gender neutral profession, abuses, victims of abuse and abuser and appropriate stress management to be decentralized and monitored by the NMC.
2. Health facilities should have an independent functional offices or contacts displayed for easy accessibility by complainants of abuse claims with an effective and efficient investigation and management team lead by a human right activist and monitored by the nurses and midwives council for a positive impact to the nurses, the profession and the patients.
3. More research is needed on gender inequality in the nursing profession and its effect on health service delivery in order to achieve equality across all domain.

London Journal of Medical and Health Research

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

58   Volume 22 | Issue 13 | Compilation 1.0   © 2022 London Journals Press

In a distinctive way, my dear in-law Mr. Alex Bwongamoi Okello, Thank you very much for the financial and full support and mature guidance when i needed, despite your tight schedules at office as the Permanent Secretary, Directorate for Ethics and integrity and your private activities. You are a blessing to me. May God bless you.

Special tribute to my dear husband Mr Ojara Thomas, my children Rubangakene Emmanuel, Aber Mary, Oceng Samuel and Laker Maurine; and family members who provided me the supportive environment and allowed me to rob them of the essential family time and resources to put in this work.

The research team which included the research assistants Kato Steven, Peter and Geoffrey; ICT specialist and data base designer Kilama Moroto; Data entrants Rubangakene Emmanuel and Adolf Plato; and data analyst Acaye James. Sincerely, i recognised all your efforts that brought the study to the current level. God's blessing to you all.

My friends Odong Geoffrey a tutor at Uganda Christian Institute of health sciences Lira, Okiro Moses a staff at Infectious Diseases Research collaboration, Atiakoriet Harriet a Staff at Baylor Uganda and Atim Elizabeth, a student from Clarke International University. You are great friends and whole heartedly I appreciate your contribution to this work. Your ideas and advises were very valuable.

The list is endless but I apologize to those whose name were not mention but you are not forgotten. May God bless everyone and reward you abundantly.

List of abbreviations

WHO	World Health Organization
MOH	Ministry of Health.
NMC	Nurses and Midwives Council
PI	Principal Investigator
SPNO	Senior Principal Nursing Officer
RRH	Regional Referral Hospital
NTI	Nursing Training Institution
SNM	School of Nursing and Midwifery
EIGE	European Institute for Gender Equality
SDG	Sustainable Development Goal
MDG	Millennium Development Goal
REC	Research Ethics Committee
UNCST	Uganda National Council of science and Technology
CIU	Clarke International University
NP	Nursing Profession
O' level	Ordinary level of education
A' level	Advanced level of education
GI	Gender Inequality
SPSS	Statistical package for social scientist

REFERENCES

1. Achora, S., 2016. conflicting image: experience of male nurses in a uganda's hospital. international journal of africa Nursing science, Volume 5, pp. 24-28.
2. Becker, M. B. N. &. F., 2010. Isreali's percieved motivation for choosing a nursing career. nurse Education today, 30(4). https://doi.org/10.1016/j.nedt.2009.08.006, pp. 308-313.
3. Brandon W. Smith, J. R. B. E. J. M. J. S. Y. S., 2021. professional success of men in Nursing work force: an integrative review. Journal of Nursing Management,https://doi.org/10.1111/jonm.13445.
4. Brody, A., 2019. Exploring gender equality in the health workforce, a study in Uganda and Somaliland, s.l.: Tropical Health and Education Trust.
5. DeVito, J., 2016. The experience of male Nursing Students. Nursing Forum, 51(49(doi:10.1111/nuf.12149.Epub2015Nov9.PMID; 26549349)), pp. 246-253.
6. Jhpiego, 2020. Gender concepts and definition. [Online][Accessed 19 august 2021].

London Journal of Medical and Health Research

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

© 2022 London Journals Press

Volume 22 | Issue 13 | Compilation 1.0

59

7. Press, O. U., 2021. www. oxfordreference. com>Declaraion of philadelphia [Online] [Accessed 15 August 2021].

8. Summer, S., 2017. ICN voice to lead. [Online] [Accessed 16 08 2021].

9. Twomey. J, M. R. &., 2011. Men student nurses: The Nursing education experience. Nursing Forum, 46(4), pp. 269-279.

10. Ukke Karabacak, E. U. E. A. N. B., 2012. Image of Nursing held by Nursing students According to gender; a qualitative study. International Journal of Nursing Practice, 18(6), pp. 537-544 https://doi.org/10.1111/ijn. 12008.

11. WHO, 2019. delivered by women, led by men: a gender and equity analysis of global health and sociall workforce, s.l.: iris (Institutional Repository for Information Sharing).

12. WHO, April, 2020. The First Ever State of World's Nursing Report:Unlocking the gender dimension, Wilson Center: Deekshita Rama-narayanan.

13. WHO, n.d. euro.who.int>Gender definitions>. [Online] [Accessed 18 Sept 2021]

London Journal of Medical and Health Research

Individual-Related Factors Influencing the Striking Gender Inequality in the Nursing Profession, a Cross Sectional Study among Nurses and Student Nurses from Selected Hospitals and Nurses Training Institutions in the Northern Cities of Uganda

60 Volume 22 | Issue 13 | Compilation 1.0   © 2022 London Journals Press

Longitudinally Extensive Transverse Myelitis in Measles: A Rare Case Report and Review of the Literature

Dr. Gajjar Jay Daxay, Dr. Madhur Sarthalia, Dr. Susheel Kumar Saini & Dr. Seema Kumari

ABSTRACT

We report a rare case of longitudinally extensive transverse myelitis (LETM), a rare but disabling condition defined as a lesion of the spinal cord that extends over four or more vertebrae on MRI, in association with measles. Measles related devastating neurological disorders include primary measles encephalitis, acute post measles encephalitis, subacute sclerosing panencephalitis (SSPE) and measles inclusion body encephalitis (MIBE). Due to rarity of disease and poor prognosis of LETM in patients, prompt diagnosis and treatment is of critical importance for a positive clinical outcome. We provide a comprehensive perspective of past and current literature in order to aid diagnosis and management of this rare phenomenon.

Keywords: longitudinally extensive transverse myelitis, measles, rare.

Classification: WC 518

Language: English

London Journal of Medical and Health Research

Longitudinally Extensive Transverse Myelitis in Measles: A Rare Case Report and Review of the Literature

Dr. Gajjar Jay Daxay[α], Dr. Madhur Sarthalia[σ], Dr. Susheel Kumar Saini[ρ] & Dr. Seema Kumari[ℭ]

ABSTRACT

We report a rare case of longitudinally extensive transverse myelitis (LETM), a rare but disabling condition defined as a lesion of the spinal cord that extends over four or more vertebrae on MRI, in association with measles. Measles related devastating neurological disorders include primary measles encephalitis, acute post measles encephalitis, subacute sclerosing panencephalitis (SSPE) and measles inclusion body encephalitis (MIBE). Due to rarity of disease and poor prognosis of LETM in patients, prompt diagnosis and treatment is of critical importance for a positive clinical outcome. We provide a comprehensive perspective of past and current literature in order to aid diagnosis and management of this rare phenomenon.

Keywords: Longitudinally extensive transverse myelitis, Measles, Rare.

Author α: MBBS, MD Pediatrics Trainee, NIMS medical college, Jaipur.
σ: MBBS, MD Pediatrics Trainee, NIMS medical college, Jaipur.
ρ: MBBS, MD Pediatrics, FNB Pediatric Intensive care. Assistant Professor, NIMS medical college, Jaipur. P. No. 14, Ganesh nagar, Near kishor nagar, Murlipura. Jaipur, Rajasthan, India.
e-mail: kumarsainisusheel@gmail.com
ℭ: MBBS, MD Anaesthesiology Assistant Professor, NIMS medical college, Jaipu.

I. OBJECTIVE

Established as a viral disease, highly contagious and acute infectious, Measles is characterized by being a febrile exanthematous disease, caused by viruses of the family Paramyxoviridae, of the genus Morbillivirus, which has eight classes and 24 genotypes and the human being is its only reservoir and source of infection.[1,2]

The classic clinical condition is associated with fever, coryza, conjunctivitis, photophobia, morbilliform maculopapular rash, with cephalocaudal distribution, that is, it starts on the forehead, around the ears and neck, in the hairline and in the cranio-caudal direction, associated respiratory symptoms, such as dry cough. It presents tropism in the upper airways and can evolve with serious complications such as otitis, laryngitis, diarrhea, in addition to pneumonia and encephalitis, which are the main causes responsible for deaths [3]

LETM is a heterogeneous inflammatory disorder of the spinal cord characterized by acute or subacute development of motor weakness, sensory impairment, and autonomic dysfunction. Etiologies include idiopathic or secondary LETM which can be directly associated with infectious, systemic inflammatory or multifocal central nervous system disease. Despite the known neuro-invasive nature of measles virus the development of LETM is a rare manifestation. Few cases have been reported including the development of LETM at the initial time of presentation or subsequent development of LETM following recovery measles.

Only few cases of post measles mumps rubella vaccine (MMR) are reported.[4,5] In this report, we present a case with radiographic evidence of longitudinally extensive transverse myelitis in the patient with measles infection.

II. CASE PRESENTATION

A 8 year old male presented to pediatric emergency department, NIMS medical college, Jaipur with history of cough – coryza for 7 days, high grade fever for 7 days, rashes over body for 6 days and limb weakness for 2 days. Morbilliform maculopapular rash developed on day 2 of fever which started from neck area and than gradually involved the whole body. Limb weakness was gradual on onset, progressive and associated with sudden urinary incontinence. The patient denied any history of trauma. Patient had normal development history but he did not receive any vaccination in past.

On presentation, his vitals were the following: temperature 98.1 °F, pulse 74/min, blood pressure 102/64, respiratory rate 24/min and oxygen saturation (SpO2) of 99% on room air.

Neurologic exam on admission showed muscle strength of 0/5 strength in lower extremities and 4/5 strength in upper extremities. Deep tendon reflexes were absent in bilateral lower limbs and planter reflex was absent. He was conscious and oriented on admission. Rashes were in the stage of recovery at the time of presentation. Urinary bladder was distended due to retention of urine.

The remainder of the physical examination was within normal limits.

Brain magnetic resonance imaging (MRI) were negative for acute infarct or hemorrhage. Urgent MRI of the cervical and thoracolumbar spine were done which showed diffuse hyperintense T2 signal from the level of cervicomedullary junction up to lower thoracic vertebra level without any evidence of cord compression.

Cerebrospinal fluid (CSF) analysis showed a high white blood cell (WBC) count of 20 (ref. 0–5 cells/μL) with 15% neutrophils and lymphocyte count of 85%. CSF protein was high at 56 mg/dL (ref.15–45 mg/dL) and glucose was high at 203 mg/dL (ref.40–70 mg/dL). Measles antibody immunoglobulin M (Ab-IgM) and immunoglo-bulin G (Ab-IgG) were positive in blood and CSF in high titres. However, measles virus RNA in the spinal fluid, measured using the polymerase chain reaction method, was negative.

Bacterial cultures of the spinal fluid showed no growth. Human immunodeficiency Virus (HIV) serology, ANA - IFA were negative. The patient was started on 5 days of IV methylprednisone pulse therapy (30 mg/kg/day) followed by oral steroid therapy along with other supportive treatment. Patient showed significant clinical improvement. He was discharged to an extended care facility for physical therapy and neuro-rehabilitation after 2 wks of admission. At the time of discharge he had muscle power of 5/5 in upper limbs and 4/5 in lower limbs. On the 1month follow-up, the patient had further improvement in both his motor and sensory functions. Strength was 5/5 in the upper extremities as well as lower extremities.

Figure 1,2,3: T2W MRI spine shows T2 high signal extending from cervicomedullary junction up to the conus medullaris

III.   DISCUSSION

Measles infection is an uncommon cause of transverse myelitis in immunocompetent patients. The pathogenesis of the nervous complications of measles is unknown. Many observers believe that there are acute inflammatory processes due to the neurotropism of the measles virus. Knebusch et al.[6] also suggested that there was a cellular autoimmune process against the myelin sheath of the central tracts that was more responsible than direct infection of the spinal cord. Early diagnosis of measles related myelitis is based on its temporal relationship to the rash and detection of measles RNA or measles specific antibodies or both in the CSF and blood. Magnetic resonance imaging of the spine may demonstrate T2 hyperintense lesions in the spinal cord with occasional swelling and enhancement.

Virologically confirmed cases of measles transverse myelitis are extremely rare. Analysis of available data reveals that approximately one-half of the patients with post measles myelitis recovered completely, approximately one-fourth were left with residual deficits, and about one-fourth died.[7] Currently, there are no established treatment regimens for transverse myelitis as a complication of measles infection. Some researchers recommend high doses of methyl-prednisolone for management and use of plasmapheresis in case no response to pulse steroid therapy. Although clinical recovery is variable, many immunocompetent patients improve significantly, though fatal cases have been reported.

IV.   CONCLUSION

The involvement of the esophagus in TB is uncommon. Dysphagia is the most common symptom of esophageal TB. It is therefore important to recognize and include this entity in the differential diagnosis of patients with dysphagia particularly in countries with high incidence of TB.

To the best of our knowledge, this is the rst report of ANEC secondary to dengue infection with a very fulminant course. With the passage of time and more awareness, the outcome of ANEC is improving but it Measles and its neurological complications are preventable and must be prevented. Methylprednisolone pulse therapy appears to be a safe and effective treatment for children with transverse myelitis secondary to post-measles myelitis. More effective treatments for LETM may be available in the near future but currently this remain neurologically disabling disease.

Funding:

Conflict of interest:

Ethical approval:

REFERENCES

1. Rodrigues TS, Santos LS, Lacerda GS, Kanaan S (2019) Diagnóstico clínico, laboratorial e profilático do sarampo no Brasil. J Bras Patol Med Lab 55(4).

2. Organização Pan-Americana de Saúde (OPAS) (2019) Folha informativa - Sarampo.

3. Patzer JD, Martins LG, Ranieri T, et al. Boletim Epidemiológico. pp. 16.

4. Joyce KA, Rees JE. Transverse myelitis after measles, mumps, and rubella vaccine. BMJ. 1995 Aug 12;31 1(7002):422. doi:10.1136/ bmj. 311.7002.422a. PMID: 7640590; PMCID: PMC2550491.

5. Lim S, Park SM, Choi HS, Kim DK, Kim HB, Yang BG, Lee JK. Transverse myelitis after measles andrubella vaccination. J Paediatr Child Health. 2004 Sep-Oct;40(9-10):583-4. doi:0.1111/j.1440-1754.2004.00470.x. PMID: 15367159.

6. M. Knebusch, H.M. Strassburg and K. Reiners, Acute transverse myelitis in childhood: nine cases and review of the literature, Dev Med Child Neurol 40 (1998), 631–639.

7. J.O. Rydeen and J. Glaser, Ascending myelitis complicating measles, J Pediatr 121 (1942), 374–377