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## A Comparative Study to Evaluate the Effectiveness of Structured Teaching Programme and Video Assisted Teaching Programme on Knowledge Regarding Biomedical Waste Management

Narayani Sahu<sup>1</sup>, Bhawana Sahu<sup>2</sup>, Prerna Sahu<sup>3</sup>, Draupati Pandram<sup>4</sup>, Nomeshwari Sahu<sup>5</sup>,  
Chandrakanta Thakur<sup>6</sup>

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### Abstract

"A comparative study to evaluate the effectiveness of structured teaching programme and video assisted teaching programme on knowledge regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students at Govt. Nursing College Kabirdham (C.G.)" In this study the sample size was 36 students (structured teaching programme group 18 students, video assisted teaching programme group 18). The sampling technique used was probability simple random (lottery method) sampling technique. The research design adopted for the study was two groups pretest and posttest quasi experimental research design. The tool developed was structured knowledge questionnaire consist of two section. (A) Socio demographic data and section (B) structured knowledge questionnaire. Descriptive and inferential statistics were used to analyze the obtained data. Results shows that there is no significant association between pretest knowledge of B.Sc. nursing 2<sup>nd</sup> year students with selected socio demographic variables at the level of  $p < 0.05$ . Finding related to the structured teaching programme the posttest mean score 25.16, standard deviation + 3.25 and video assisted teaching programme the posttest mean score 24.44, standard deviation +3.91. Between the structured teaching programme and video assisted teaching programme the posttest mean differences 0.72 and "t" test value is 0.60 degree of freedom 34 at the level of  $p < 0.05$ . Which shows that there is significant difference between level of knowledge through structured teaching programme and video assisted teaching programme regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students.

**Keywords:** Biomedical Waste Management; lottery method; Video-assisted.

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### Introduction

Biomedical waste has been defined as any waste that is generated during diagnosis, treatment and immunization of human being or animals or in the research activity pertaining to or in the production and testing of biomedical.<sup>1</sup> Biomedical waste may be solid or liquid. Examples of infectious waste include discarded blood, sharps, unwanted microbiological cultures and stocks, identifiable body parts (including those as a result of amputation), other human or animal tissue, used bandages and dressings, discarded gloves, other medical supplies that may have been in contact with blood and body fluids, and laboratory waste. Waste sharps include potentially contaminated used (and unused discarded) needles, scalpels, lancets and other devices capable of penetrating skin.<sup>2</sup> Approximately more than three fourth health care waste are non hazardous while the remaining proportion is hazardous.<sup>3</sup> World Health organization reports 20% of total waste generated by health care activity are hazardous. Hospitals and other health care facilities generate lots of waste

which can transmit infections, particularly HIV, Hepatitis B & C and Tetanus, to the people who handle it or come in contact with it.<sup>4</sup> India generates around three million tonnes of medical wastes every year and the amount is expected to grow at eight per cent annually.<sup>4</sup> Indiscriminate disposal of BMW or hospital waste and exposure to such waste possess serious threat to environment and to human health that requires specific treatment and management prior to its final disposal.<sup>5</sup> The problem of biomedical waste disposal in the hospital and other health care establishment has become an issue of increasing concern, promoting hospital administration to seek new ways of scientific, safe and cost effective management of the waste and keeping their personnel informed about the advances in this area. Managing healthcare waste requires effective knowledge not only among those who produce the healthcare waste but also among those who handles it.<sup>6</sup> The need of proper hospital waste management system is importance is an essential component of quality assurance in hospital as well as the knowledge of the worker in effective waste disposal also prime importance.

### ***Statement of the Problem***

"A comparative study to evaluate the effectiveness of structured teaching programme and video assisted teaching programme on knowledge regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students at Govt. Nursing College Kabirdham (C.G.)."

### ***Objectives***

1. To assess the pretest knowledge regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students.
2. To evaluate the effectiveness of structured teaching programme on knowledge regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students.
3. To evaluate the effectiveness of video assisted teaching programme on knowledge regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students.
4. To compare structured teaching programme v/s video assisted teaching programme on knowledge regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students.
5. To find out the association with pretest

knowledge scores among B.Sc. Nursing 2<sup>nd</sup> year students with selected socio demographic variables.

### ***Hypotheses***

*H*<sub>0</sub> = There is no difference between the effectiveness of structured teaching and video assisted teaching programme on knowledge regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year student at the level of *p* ≤ 0.05.

*H*<sub>1</sub> = There will be significant difference between the pretest and posttest knowledge regarding biomedical waste management through structured teaching programme among B.Sc. nursing 2<sup>nd</sup> year students at the level of *p* ≤ 0.05.

*H*<sub>2</sub> = There will be significant difference between pre test and post test knowledge regarding bio medical waste management through video assisted teaching programme among B.Sc. nursing 2<sup>nd</sup> year students at the level of *p* ≤ 0.05.

*H*<sub>3</sub> = There will be significant association between pretest level of knowledge regarding biomedical Waste management with selected socio demographic variables.

### ***Literature Reveiw***

The following literature was reviewed to highest the important concept of biomedical waste management which is organized under the following section:

- A) Biomedical waste management.
- B) Effectiveness of structured teaching programme.
- C) Video assissted teaching programme.

Chudasama Rajesh et al. (2013) Bio medical waste (BMW) collection and proper disposal has become a significant concern for both the medical and general community. Effective management of biomedical waste is not only a legal necessity but also a social responsibility. Objective: To know the knowledge, attitude and practice among health care personals working in tertiary care centre. Methods: The study was conducted from January 2013 to June 2013. It was a descriptive observational hospital based cross sectional study. Study participants included the resident doctors intern doctors, nursing staff, laboratory technicians, ward boys and sweepers working in the institute who are dealing with BMW. The study was conducted

by using pretested, semi-structured proforma. The data was tabulated and interpretation was done by using percentages through Epi Info 3.5.1 software. Results: It included 123 resident doctors and interns, 92 nurses, 13 laboratory technicians, and 54 sanitary staff. Majority of study participants belongs to 21–30 years (61%) age group. Only 44.3% study participants received training for bio medical waste management. HIV (74.47%) and Hepatitis B (56.03%) were the main infectious diseases transmitted by the bio medical waste. Conclusion: The importance of training regarding bio medical waste management cannot be overemphasized, lack of proper and complete knowledge about bio medical waste management impacts practices of appropriate waste disposal.<sup>7</sup>

## Materials and Methods

The research design adopted for the study was two groups pretest and posttest quasi experimental research design. The setting of the study was at Govt. Nursing College Kabirdham (C.G.).

The target population in the study were B.Sc. nursing 2<sup>nd</sup> year students studying at Smt. Sudha Devi Memorial Govt. Nursing College Kabirdham. In this study the sample size was 36 students (structured teaching programme group 18 students, video assisted teaching programme group 18). The sampling technique used was probability simple random (lottery method) sampling technique.

The tool developed was structured knowledge questionnaire consist of two section. (A) Socio demographic data and section (B) structured knowledge questionnaire. The content validity of the tool was done by experts. The value of 'r' was found to be 0.98, hence the tool were reliable. Statistical analyses were undertaken by using Statistical Package for Social Science (SPSS) 16.0 version.

Informed consent was obtained from 36 B.Sc. nursing 2<sup>nd</sup> year students who were selected as a sample for the study. Explanation was given regarding the purpose of the study. Confidentiality was insured. Due permission from authority was sought and obtained.

## Results and Discussion

Majority of students {11 (61.11%) students of structured teaching programme and 17 (94.44%) students of video assisted teaching programme}

were between the age Group 18–20 years. All of the students 18 (100%) students of structured teaching programme and 18 (100%) students of video assisted teaching programme were female. Majority of students 17 (94.44%) students of structured teaching programme and 15 (83.33%) students video assisted teaching programme were Hindu. Majority of students 16 (88.88%) students of structured teaching programme and 18 (100%) students of video assisted teaching programme were not having any clinical experience. Majority of students 15 (83.33%) students of structured teaching programme and 11 (61.11%) students of video assisted teaching programme were not attended seminar related to biomedical waste management.

### *1. To assess the pretest knowledge regarding biomedical waste management among B.Sc nursing 2<sup>nd</sup> year students.*

In group one of structured teaching programme obtained pretest value mean 18.05, standard deviation  $\pm$  2.09 and other group of video assisted teaching programme pretest mean was 17.27 with standard deviation  $\pm$  4.72 .

### *2. To evaluate the effectiveness of structured teaching programme regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students.*

Finding related to the effectiveness of structured teaching programme regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students. The pretest value mean 18.05, standard deviation  $\pm$  2.09, posttest mean score was 25.16, standard deviation  $\pm$  3.25 and *t*- test value 6.89 at the level of  $p \leq 0.05$ . Hence, the hypothesis 1 is accepted, there is significant difference between pretest and posttest knowledge regarding biomedical waste management through structured teaching programme among B. Sc. Nursing 2<sup>nd</sup> year students at the level of  $p \leq 0.05$ . Thus the structured teaching programme is effective method for improving the knowledge.

### *3. To evaluate the effectiveness of video assisted teaching programme regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students*

Finding related to the effectiveness of video assisted teaching programme regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students. The pretest mean was 17.27 with standard deviation  $\pm$  4.72, posttest mean score 24.44 and standard deviation  $\pm$  3.91 and *t* - test value 5.40 at the level of  $p \leq 0.05$ .

Hence, the hypothesis 2 is accepted, there is significant difference between pretest and posttest knowledge regarding biomedical waste management through video assisted teaching programme among B. Sc. Nursing 2<sup>nd</sup> Year students at the level of  $p \leq 0.05$ . Thus the video assisted teaching programme is also effective methods for improving the knowledge.

**4. To compare structured teaching programme v/s video assisted teaching programme on biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students**

Finding related to the structured teaching programme the posttest mean score 25.16, standard deviation  $\pm 3.25$  and video assisted teaching programme the posttest mean score 24.44, standard deviation  $\pm 3.91$ . Between the structured teaching programme and video assisted teaching programme the posttest mean differences 0.72 and 't' test value is 0.60 degree of freedom 34 at the level of  $p \leq 0.05$ . Hence, null hypothesis was rejected, there will be significant difference between level of knowledge through structured teaching programme and video assisted teaching programme. Thus the structured teaching programme will be more effective than video assisted teaching programme for improving the knowledge.

**Table 1:** Represents the posttest knowledge score of structured teaching programme and video assisted teaching programme.

Group	Assessment	Mean score	Standard deviation	Degree of "t" test freedom	value
Structured teaching programme	Posttest	25.16	+3.25		
Video assisted teaching	Posttest	24.44	+3.91	34	0.605*

\*significant at the level of  $p \leq 0.05$

**5. To find out the association with pretest knowledge scores among B.Sc. Nursing 2<sup>nd</sup> year students with selected socio demographic variables.**

Findings related to the association between pretest knowledge score of B.Sc nursing 2<sup>nd</sup> year students with their selected socio demographic variables. Hence RH3 was rejected. There will be significant association between pretest knowledge of B.Sc. nursing 2<sup>nd</sup> year students with selected socio demographic variables at the level of  $p \leq 0.05$ .

## Conclusion

The study was to assess the effectiveness of

structured teaching programme v/s video assisted teaching programme regarding biomedical waste management among B.Sc. nursing 2<sup>nd</sup> year students in selected Govt. Nursing College, Kabirdham. Objectives and specific hypothesis regarding pretest and post test score and socio demographic variables were framed. Scientific and objective research methodology was adopted to assess the level of knowledge among B.Sc. Nursing 2<sup>nd</sup> year students regarding biomedical waste management before and after imparting structured teaching programme and video assisted teaching programme. Its effect on knowledge level was seen by computing various statistical methods to achieve the objectives of the study. Planned structured teaching programme and video assisted teaching programme was developed and administered to increase the level of knowledge. The finding of the present study display an effect of planned structured teaching programme and video assisted teaching programme for increasing the knowledge level in B.Sc. nursing 2<sup>nd</sup> year students about biomedical waste management and our teaching programme is effective but structured teaching programme are more effective rather than video assisted teaching programme.

## References

1. Arora Bala Brij, Essential of microbiology, 1<sup>st</sup> edition, 2017, CBS publisher distributor Pvt. Ltd. New Delhi 44-47.
2. [https://en.wikipedia.org/wiki/Biomedical\\_waste](https://en.wikipedia.org/wiki/Biomedical_waste).
3. Ananthnarayan And Panikers, Textbook of microbiology 10<sup>th</sup> edition published by universities. (India) private limited 626-27.
4. Priya Datta et al., Biomedical waste management in India: Critical appraisal retrieved from <http://vikaspedia.in/energy/environment/waste-management/bio-medical-waste-management/what-is-bio-medical-waste>.
5. Mathur P, et al., Need of Biomedical Waste Management System in Hospitals - An Emerging issue - A Review. Curr World Environ 2012;7(1):117-124 retrieved from <http://www.cwejournal.org/vol17/no1/need-of-biomedical-waste-management-system-in-hospitals-an-emerging-issue-a-review/>.
6. Biomedical Waste Management in India: Still a looming concern retrieved from <https://www.downtoearth.org.in/blog/health/world-health-day-indian-tale-of-unfulfilled-goals-63868>.
7. B. Shridhar Rao, Text book of community health nursing 1<sup>st</sup> edition 2014 published by Virender Kumar Arya AITBS publisher India 221-419.

## A Pilot Study on Job Satisfaction of Medical Coders

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### Abstract

A medical classification is used to transform descriptions of medical diagnoses (or) procedures into standardized statistical code in a process known as medical coding. Job satisfaction is the extent to which an employee feels self-motivated, content and satisfied with his/her job. India stands the second largest pool of medical coders after the US with an estimated Rs.15,000 – Rs.16,000. The US is believed to have over 2,50,000 coders. From the past few years, the nurses are more aspiring to join in a profession of medical coding. Therefore, the study aims to assess the level of job satisfaction among medical coding staff at Health care, Vijayawada, Krishna District, Andhra Pradesh, India.

**Methods:** A Cross sectional study was conducted including convenient sampling technique among 30 medical coders. The data were collected by self administered questionnaire scale related to socio-demographic data and job satisfaction and analyzed by descriptive and inferential statistics.

**Results:** The results revealed that, there was moderate level of job satisfaction and there is association between levels of job satisfaction with selected demographic variables of medical coders.

**Conclusion:** In this study medical coders are moderately satisfied with their jobs, the above findings of the study provides evidence that there are many factors which can affect the job satisfaction level which will in-turn affect the quality of productivity of the organization.

**Keywords:** Job satisfaction; Medical coders; Health care; Coding staff; Employer self motivation.

### Introduction

Job satisfaction is a degree of favorableness with which employees view their work;<sup>1</sup> which is a great concern of medical coders. It is an important contributing factor towards a person's motivation and productivity.<sup>1-4</sup> Satisfied employees tend to be more productive, creative and committed to their

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employers; dissatisfied work area lead to high turn-over.<sup>5</sup>

It was found that separation of unpleasant emotion decreases job satisfaction and implication of pleasant emotions increases job satisfaction.<sup>5</sup> Many studies have shown that job satisfaction can be influenced by a wide variety of factors such as competitive pay, adequate staffing, a pleasant working environment, opportunities for personal and professional growth, a reasonable workload, recognition, positive relationship with co-workers, autonomy on the job, job security, career advancement and contingent rewards.<sup>6-8</sup>

Job satisfaction can be measured in many ways with variety of questions and wordings; However, there is no standard way to measure job satisfaction.<sup>1</sup> A common item question regarding general job satisfaction is the most common one, however other multifaceted questions are also considered as a common component of job satisfaction measurement.<sup>1</sup>

Researcher has analyzed the importance of job satisfaction among medical coders which has direct effect on work productivity of medical coders and indirect effect on absenteeism, and turnover. Therefore we felt the need to assess the level of job satisfaction and association with their baseline variables.

### Objectives

1. To assess the level of job satisfaction among medical coders.
2. To determine the association between level of job satisfaction of medical coders with their selected variables.

### Hypothesis

$H_1$ : There will be a significant association between levels of job satisfaction of Medical coders with their selected variables.

### Materials and Methods

A cross sectional pilot study was conducted among medical coders (Nurses, Pharmacists and Biochemists) from 01.05.2019 to 30.05.2019 adopting convenient sampling approach. Thirty medical coders were chosen based on the following criteria, all staff or coders above age 20 years, both genders, with service period more than 6 months, willing to participate in the study; coders who were in leave were excluded from the study.

A self-administered questionnaire scale was used to collect the data from the medical coders. The questionnaire comprised of 2 main parts (i.e.) Demography and Job Satisfaction questions. The demographic data included information regarding Age, Gender, Education, Years of experience and Designation.

Job satisfaction questionnaire scale included 20 questions on different components like Job, Communication, Working relationship, promotion,

pay, supervisor role, ability to present skills, esprit de corps, prospects of advancement and welfare facilities provided by the organization. For each item, respondent can choose from a 4 point Likert scale, representing various degrees of satisfaction.

1. Strongly disagree
2. Undecided
3. Agree
4. Strongly agree

The total score was graded as "80" and the level of job satisfaction was classified into three levels for statistical convenience (i.e.) Highly satisfied (71-80), Moderately satisfied (61-70) and unsatisfied (<60).

The data were collected after obtaining permission from the authorities, ethical concern from Institutional ethical committee and the consent was obtained from the participants. The data were gathered by using the job satisfaction questionnaire scale; It took 20 minutes to gather data from each employee and session was closed by thanking the employees. The collected data were analyzed by using descriptive and inferential statistics.

### Results

Out of 30 medical coders, majority 15 (50%) were with age between 21-25 years, 16 (53.3%) were males, 9 (30%) had B.Pharmacy and M. Pharmacy as qualification, followed by B.Sc., Nurses 8 (26.7%) and 18 (60%) were having > 6 months - 2 years of experience and 14 (46.6%) were executive coders (Fig. 1 and Fig. 2).

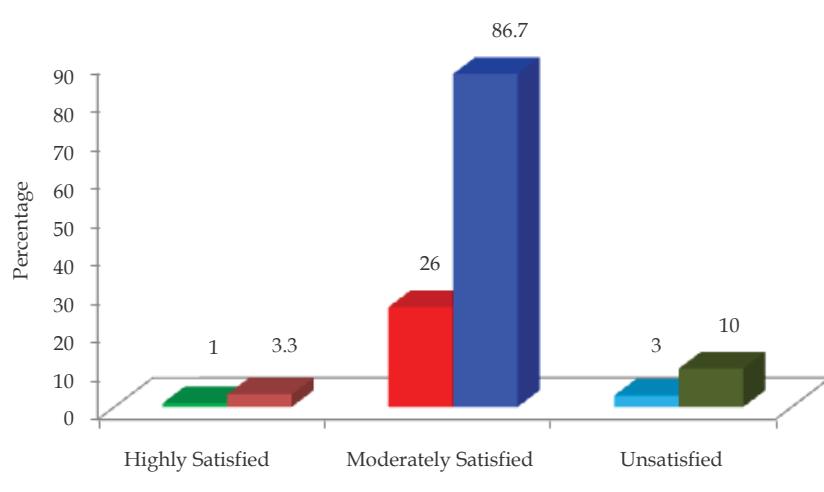
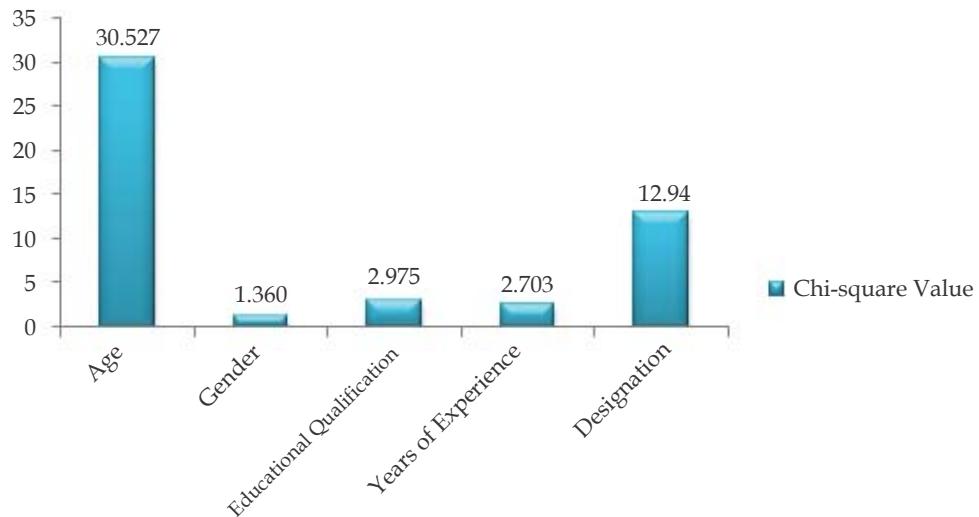


Fig. 1: Level of job satisfaction of medical coders.



**Fig. 2:** Association between the level of job satisfaction with the selected demographic variables.

## Discussion

Several studies have reported that job satisfaction dramatically influences the medical coders working setting. For, this reason we chosen a job satisfaction questionnaire scale to collect the data and has low refusal rate. Our findings showed that 86.7% respondents had moderate job satisfaction level with their job.

In this study the largest percentage of respondents felt satisfied with the general supervision in their department, working conditions in the organization, relationship with the supervisor, job security and proud to be part of organization. Majority stated that there is no prejudice or favouritism that play a role in the organization and their organization is better in comparison to others. Surprisingly, most of the respondents were not satisfied with their promotions at their current working place. This findings is in line with similar studies conducted in South India, South Africa, Malaysia and Pakistan. On the other hand, pharmacists working in Saudi Arabia, Iran and UK who do not face similar issues, were satisfied with their work. These findings are congruent with the study conducted by Akram Ahmad et al.<sup>1</sup>

Many participants stated, they are moderately satisfied with their promotions, as they are not made on merit in this organization and even stated that there is average team spirit in work area and less preference for the job is based on ability and experience. Minimum welfare facilities were provided by the organization whereas job has helped to learn less skill with more workload and most of the time supervisors do not try to take

whishes into account and my performance. They give minimal opportunity to present problems and views to the management. Majority were undecided about feeling fresh at the end of day' work and many of them were not satisfied with the salary and it is not meeting the finance of the day to life and stated that they have less prospects of advancement in this job. These findings accord with the study conducted by Mumtaz Ali Menon et al.<sup>9</sup>

Level of job satisfaction predictors assessed by Shelledy DC et al.<sup>10</sup> are promotions, participation in decision making, supervisor support, role clarity, independence, ease of obtaining time off and co-workers support.<sup>10</sup> Hence, there is a need to focus on the impact of all these factors for the improvement of job satisfaction in the working area.

Present study shows significant association between level of job satisfaction and baseline demographic variables i.e., Age, Gender, Educational Qualification, Years of Experience and Designation which is supported by Sorman and Sudha et al library profession is a people slanting profession which connects escape from the authority of conflicts and frusta provisions and age, mental status and experience have an impact and professional role stress.<sup>11,12</sup>

## Limitations

The results of this study should be interpreted with consideration of the limits of measurement of satisfaction, analysis of data and recruiting methods of participants which could limit the generalizability of the results.

## Conclusion

The study conclude that there are many factors which can affect the job satisfaction level among medical coders which will in-turn affect the quality of productivity and organization too. Thus, importance should be given towards salary, helping to learn more skills, promotions on merit, team spirit and prospects of advancement in job.

## References

1. Ahmad A, Khan MU, Elkalni RM, et al. Job Satisfaction Among Indian Pharmacists: An exploration of Affecting Variables and Suggestions for Improvement in Pharmacist Role. IJPER. 2015;50(1):9-16.
2. Arm strong M. A Handbook of Human Resource Management Practice. Kogan Page Publishing, Londan, Tenth edition; 2006.
3. Bowling NA. Is the job satisfaction- Job performance relationship spurious? A meta-analytic examination. J VocatBehav 2007;71(2):167-85.
4. Iaffaldano MT, Muchinskey PM. Job satisfaction and job performance: A meta-analysis. Psychol Bull. 1985;97(2):251.
5. Jagadale S, Chinchpure S. A Descriptive Study to Assess the Job Satisfaction among the Nursing Staff of Selected Hospital of Pune City, AJNER. 2016;6(2):204-8.
6. Pillay R. Work Satisfaction of Professional Nurses in South Africa; A Comparative Analysis of Public and Private Sectors. BMC Human Resources for Health 2009;7:15.
7. Eker L, Tuzun EH, Dasakapan A, Surenkok D. Predictors of Job Satisfaction Among Physiotherapists in Turkey. Journal of Occupational Health 2004;46:500-5.
8. Khamlub S, Harun-Or-Rashid M, Sarker MA, et al. Job satisfaction of health-care workers at health centers in Vientiane Capital and Bolikhamsai Province, Lao PDR. Nagoya J Med Sci. 2013;75(3-4):233-241.
9. Memon MA, Ting H, Salleh R, et al. Level of Stress and Job Satisfaction Among All Operators : A Case of Malaysian Telecommunication Sector. IRMM 2016; 6(3):442-47.
10. Shelledy DC, Mikles SP, May DF, Youtsey JW. Analysis of Job Satisfaction, burnout and intent of respiratory care practitioners to leave the field or the job. Respiratory care 1992;37(1):46-60.
11. Sorman SA, Sudha S. Occupational Role stress on Women Librarians: A Study, SRELS Journal of Information Management 2013;40(2):201-14.
12. Das AK. Job Satisfaction among the Library Professional in Private Engineering College in Hooghly District of West Bengal, India. Res. J. Library Sci 2015;3(5):8-14.

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## Effect of Polycystic Ovarian Syndrome on Exercise Capacity

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### Abstract

Polycystic Ovarian Syndrome (PCOS) is a common endocrinological problem leading to improper, anovulatory menstrual cycle, moreover some individuals may begin to develop cysts. Other changes observed are weight gain, fatigue as well as feeling of low energy levels. These could partially be due to loss of sleep, infertility and skin problems. The current study aims to study the effect of PCOS on the functional capacity as predicted by aerobic capacity. Further the results will increase awareness about the capacity to undergo physical tasks and therefore the cardiovascular health. Twenty-six women participated in the current cross-sectional study, who were in the age group of 18–40 years, with body mass index between 18.5–24.9. The participants were divided into two groups those diagnosed with PCOS and those without it. The study infers that the women with diagnosis of PCOS brought no disparity in  $VO_{2\text{max}}$ . This examination likewise signified that the PCOS diagnosis is not related with aerobic exercise capacity and it is anticipated that endurance exercise performance and the deduced effort required amid exercise do not have any distinction between both the groups.

**Keywords:** PCOS;  $VO_{2\text{max}}$ ; BMI; Pulse Rate; Blood Pressure.

### Introduction

Polycystic ovary syndrome (PCOS) is a composite condition which is characterised by increase in levels of androgen, irregularities in menstrual cycle, and small cysts which can be found either in one or both of the ovaries with prevalence ranging from 2.2% to 26%.<sup>1,2</sup> It is mainly a biochemical disorder known as hyperandrogenaemia or it is a morphological disorder (polycystic ovaries). Also, the clinical hallmark of PCOS is inhibiting the development of follicles, ovaries having micro-cysts- Hyperandrogenism, leading to the restraint in the development of follicles, anovulation, ovaries having micro-cysts and changes in the

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menstruation.<sup>1</sup> Women who have PCOS [5–10% of females in the age of 18–44 years<sup>3</sup>] may encounter unpredictable menstrual cycles i.e., menstrual cycle might be less or maybe more recurrent because of less repetitive ovulation, amenorrhea- a few women with PCOS do not have menstrual cycle, for many years in some of the cases. Additionally, one can have uncontrolled facial or body hair development (or both), can have acnes on the skin and hair loss from scalp. Women also finds difficulty in conception as there is an absence of ovulation or ovulation is less recurrent. Women may also have changes in the mood like depression or anxiety.

PCOS is also reported to be associated with obesity, insulin resistance and type II diabetes<sup>4</sup> and women with PCOS appears to be characterised by a reduced cardiopulmonary fitness as CRF is impaired in metabolic and endocrine disorders. Further studies need to be done in this area.<sup>5</sup> Cardiorespiratory fitness (CRF) or maximum aerobic capacity ( $VO_{2\text{max}}$ ) is one of the strong independent indicator of cardiovascular disease (CVD) and a significant reason of death in women.<sup>6</sup> CVD and mortality depend on the extent of CRF which a strong predictor is, so the prognostic consequence for the events of cardiovascular may be carried out if CRF is impaired. Aside from being a solid indicator of CVD and mortality it is likewise the best indicator of functional capacity and is a main determinant or main factor of a

person's capacity to withstand activities (physical activities).<sup>7-9</sup> Henceforth, the cardiorespiratory system can meet increased metabolic needs by having its involvement in the cardiovascular health and also has an impact on the ability to perform the daily life activities and undertake exercise training thus the last mentioned being the fundamental or core management widely accepted for the management of PCOS.

Studies till date have been done that evaluate the effects of PCOS on exercise function of obese/overweight women but not on women with normal weight (BMI < 18.5 or BMI > 24.9) The purpose of this study is to check if women with PCOS have any effect on aerobic exercise capacity and also to find the most extreme high-impact limit in populace with PCOS. Since the functional capacity can be best predicted by maximum aerobic capacity and also tells us about the person's capacity to undergo physical tasks. So cardiovascular health can be determined with the help of  $VO_{2\max}$ .

## Materials and Methods

Cross-Sectional study design was done on women between the age of 18–40 years, with BMI between 18.5–24.9 in Amity Institute of Physiotherapy Research Lab. The Sample Size was taken 10 and 16 for women with PCOS and NPCOS (women without PCOS) respectively. The selection criteria included that participants should have any of the two findings- Hyperandrogenism, Oligomenorrhoea and polycystic ovaries as per the Rotterdam Criteria as well as Non-Uniformity in menstruation (having the length of cycle of less than 21 days or more than 35 days). Any Neurological deficits, orthopaedic conditions, cardiovascular conditions, pregnancy and Individuals who are suffering or have a past medical history of angina, or any other disease involving any cardiac, physical or pulmonary manifestations were excluded as these conditions can lead to limitation of exercise performance eventually. A step of 41.3 cm height, metronome, stadiometer, weighing machine (electronic), inch tape, heart rate monitor and stopwatch was used during the procedure.

### Procedure

- *Pre-test:* The subjects were instructed and well explained about the procedures before the initiation of the test. Consents regarding the research were obtained in which the height and body weight for calculation of BMI, ages were noted down. The metronome

was set for the test. The heart rate, systolic and diastolic BP were recorded and noted down with the help of heart rate monitor and sphygmomanometer respectively.

- *Test:* The participants were divided into two groups of PCOS and NPCOS. They were asked to move on the step, up and down for 3 minutes at the speed of 22 steps in a minute. The participants were asked to stop as soon as the test was completed and with the help of heart rate monitor the heart beats were recorded, and with the help sphygmomanometer systolic and diastolic blood pressure were noted.
- *Scoring:*  $VO_{2\max}$  was recorded in the form of kg body mass (ml/kg/min) (McArdle et al., 1972).  $VO_{2\max}$  (ml/kg/min) =  $65.81 - [0.1847 \times \text{heart rate (bpm)}]$ <sup>(10)</sup>

## Data Analysis

Data was checked for normal and PCOS women and changed in the form of log. Before analysis women with a BMI < 18.5 or BMI > 24.9 were excluded from the analysis. Unpaired t-tests were done to calculate differences in the group. Paired t-tests were done to calculate the null hypothesis. Statistical analyses were performed using Office 365 Excel, Windows (Excel, Delhi, India). Information is exhibited in the form of mean  $\pm$  SD and the significance was kept at  $p \leq 0.05$ .

## Results

**Table 1:** Demographic Details of the participants of the two groups

	PCOS	NPCOS
n	10	16
Weight (Mean)	54.25	52.25
Height (Mean)	162.40	159.19
BMI (Mean)	20.50	20.61
Age (Mean)	23.10	25.38

BMI: Body mass index; PCOS: polycystic ovarian syndrome; NPCOS: Non-polycystic ovarian syndrome

**Table 2:** Showing the Paired t-test for PCOS

	RPR	EPR	RSBP	ESBP	RDBP	EDBP
Mean	83.30	146.10	122.30	164.00	78.40	59.00
Variance	108.90	442.32	221.79	532.22	39.38	743.33
SD	10.44	21.03	14.89	23.07	6.28	27.26
df			9.00		9.00	
P			0.00		0.00	
t Critical			2.26		2.26	

PCOS: polycystic ovarian syndrome; SD: Standard Deviation; df: degrees of freedom; RPR: Resting Pulse Rate; bpm; EPR: Exercise Pulse Rate; bpm; RSBP: Resting Systolic Blood Pressure, mm Hg; ESBP: Exercise Systolic Blood Pressure, mm Hg; RDBP: Resting Diastolic Blood Pressure, mm Hg; EDBP: Exercise Diastolic Blood Pressure, mm Hg.

**Table 3:** Showing Paired t-test for NPCOS

	RPR	EPR	RSBP	ESBP	RDBP	EDBP
Mean	82.94	133.50	120.50	153.13	76.88	72.06
Variance	83.66	496.67	262.00	522.92	51.45	70.73
SD	9.15	22.29	16.19	22.87	7.17	8.41
df	15.00		15.00		15.00	
P	0.00		0.00		0.01	
t Critical	2.13		2.13		2.13	

NPCOS: Non-polycystic ovarian syndrome; SD: Standard Deviation; df: degrees of freedom; RPR: Resting Pulse Rate; bpm; EPR: Exercise Pulse Rate; bpm; RSBP: Resting Systolic Blood Pressure, mm Hg; ESBP: Exercise Systolic Blood Pressure, mm Hg; RDBP: Resting Diastolic Blood Pressure, mm Hg; EDBP: Exercise Diastolic Blood Pressure, mm Hg.

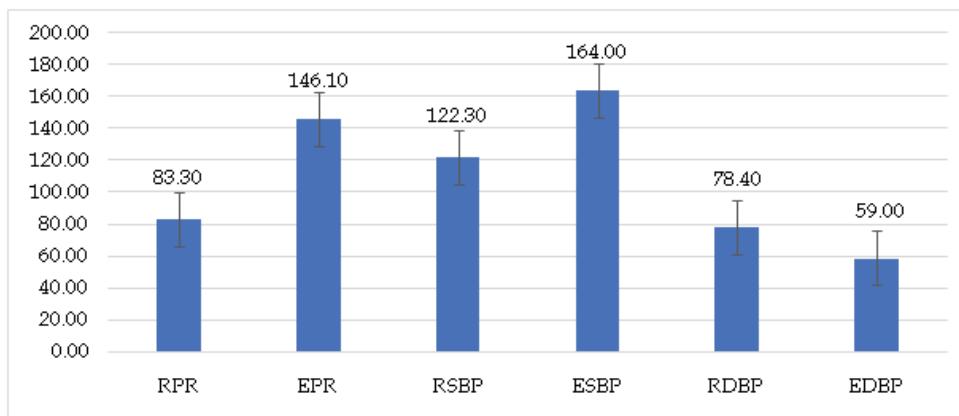
Table 4 has two groups i.e., I and II which stands for Group I (women with PCOS) and Group II (women without PCOS or NPCOS) where unpaired t test is performed. The analysis was done on 26 participants. Paired and Unpaired T test were performed on Resting heart rate, RHR and Exercise Heart rate, EHR; Resting Systolic Blood Pressure, RSBP and Exercise Systolic Blood Pressure, ESBP, Resting Diastolic Blood Pressure, RDBP and Exercise Diastolic Blood Pressure, EDBP. The Mean and SD between PCOS and NPCOS in  $VO_{2\text{max}}$  are also given in Table 2 & 3). The RPR, RSBP and RDBP between PCOS and NPCOS was found to be significant in Paired t test (Table 2 & 3). The EPR, ESBP and EDBP was found to be non-significant in PCOS (I) and NPCOS (II) in Unpaired t test (Table 4).

The Graph 1 and Graph 2 illustrates two graphs which signifies PCOS and NPCOS women RPR, EPR, RSBP, ESBP, RDBP and EDBP. Overall there is an increase in the pulse rate and systolic blood pressure post exercise (Graph 1 & 2) but a decrease in diastolic blood pressure after exercise in PCOS and NPCOS women (Graph 1 & 2). The RPR, RSBP, RDBP of PCOS and NPCOS pre and post exercise is almost same (Graph 1 & 2) whereas there is a sharp increase in EDBP of NPCOS women (Graph 2). The EPR is slightly more in PCOS women as compared to EPR of NPCOS women (Graph 1 & 2 respectively). There is an upward trend seen in PCOS women with regards to mean pulse rate and systolic bp but mean ESBP I of the PCOS women seem to have high bp as compared to mean ESBP II of NPCOS women (Graph 3).

**Table 4:** Showing Two-Sample T-t-test Results Assuming Unequal Variances in PCOS and NPCOS

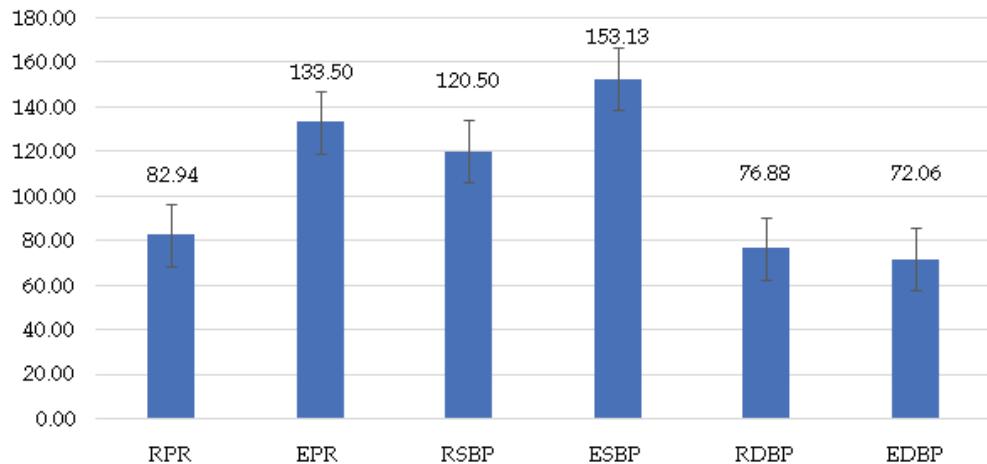
	EPR I	EPR II	ESBP I	ESBP II	EDBP II	EDBP II
Mean	146.1	133.5	164.00	153.13	59.00	72.06
Variance	442.32	496.67	532.22	522.92	743.33	70.73
SD	21.03	22.29	23.07	22.87	27.26	8.41
n	10	16	10	16	10	16
df		20		19.00		10.00
P				0.26		0.17
t Critical				2.09		2.23

PCOS: Polycystic ovarian syndrome; NPCOS: Non-polycystic ovarian syndrome; n: no. of observations, SD: Standard Deviation; df: degrees of freedom; EPRI (Group 1): Exercise Pulse Rate; bpm; ESBPI (Group 1): Exercise Systolic Blood Pressure, mm Hg; EDBPI (Group 1): Exercise Diastolic Blood Pressure, mm Hg; EPRII (Group 2): Exercise Pulse Rate; bpm; ESBPII (Group 2): Exercise Systolic Blood Pressure, mm Hg; EDBPII (Group 2): Exercise Diastolic Blood Pressure, mm Hg.



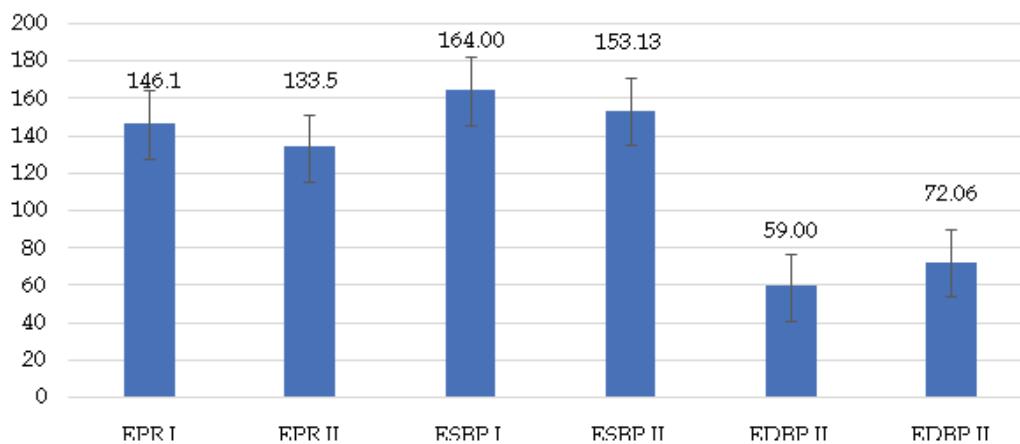
**Graph 1:** Comparison of pre and post results in PCOS

PCOS: Polycystic ovarian syndrome; NPCOS: Non-polycystic ovarian syndrome; RPR: Resting Pulse Rate; bpm; EPR: Exercise Pulse Rate; bpm; RSBP: Resting Systolic Blood Pressure, mm Hg; ESBP: Exercise Systolic Blood Pressure, mm Hg; RDBP: Resting Diastolic Blood Pressure, mm Hg; EDBP: Exercise Diastolic Blood Pressure, mm Hg.



**Graph 2:** Comparison of pre and post results of NPCOS

PCOS: Polycystic ovarian syndrome; NPCOS: Non-polycystic ovarian syndrome; RPR: Resting Pulse Rate; bpm; EPR: Exercise Pulse Rate; bpm; RSBP: Resting Systolic Blood Pressure, mm Hg; ESBP: Exercise Systolic Blood Pressure, mm Hg; RDBP: Resting Diastolic Blood Pressure, mm Hg; EDBP: Exercise Diastolic Blood Pressure, mm Hg.



**Graph 3:** Comparison between PCOS and NPCOS (Post-Exercise)

PCOS: Polycystic ovarian syndrome; NPCOS: Non-polycystic ovarian syndrome; EPRI(Group 1): Exercise Pulse Rate; bpm; ESBPI(Group 1): Exercise Systolic Blood Pressure, mm Hg; EDBPI(Group 1): Exercise Diastolic Blood Pressure, mm Hg; EPRII(Group 2): Exercise Pulse Rate; bpm; ESBPII(Group 2): Exercise Systolic Blood Pressure, mm Hg; EDBPII(Group 2): Exercise Diastolic Blood Pressure, mm Hg.

## Discussion

Cardiovascular Chronotropy (i.e., rise and fall in heart rate) and inotropy (i.e., contractility) falls under humoral (plasma norepinephrine) and autonomic (sympathetic and parasympathetic) system while exercising. A portion of the past investigations have recommended thoughtful hyperactivity in over weight/hefty young people.<sup>11</sup>

The present examination does not demonstrate

any huge contrast in resting beat rate and systolic BP values between both the values ( $p > 0.05$ ). Small sample size may be the factor in charge of this.

Initially during exercise, the rate of heart rapidly elevates because the parasympathetic tone is inhibited due to the mechanism known as central command feed forward as the message from the vagus nerve is reduced since this mechanism is responsible for the rise in heart rate nearly to 100 beats/minute. As the work rate rise, there

is an increase in the heart rate above this level because of the withdrawal of the continued parasympathetic system and also because of increase in the added effects by the stimulation of concomitant sympathetic system by the help of cardiac accelerator nerve.<sup>11</sup>

Amid the 3-Minute Step Test which is a submaximal type of activity testing technique, there is an increased interest in the body for oxygen in ordinary weight group. This leads to sympathetic over activity and norepinephrine discharge. It causes an increase in the size of heart chamber, thereby seeing a considerable rise in the stroke volume.<sup>12</sup>

When the cardiac output reaches 50% of its maximum, the stroke volume also increases by that limit. Hence, if there is any increase in heart rate then only the cardiac output will increase further.<sup>12</sup>

Accordingly, practice pulse reactions of PCOS ladies are extraordinarily typical with those of ladies with Non PCOS ladies BMI ( $p > 0.05$ ).

A slow, gradual increase in heart rate with large increases in work load signifies extremely high level of fitness. Level of physical fitness was found to be poor in both the groups although the test was not symptom limited. Women with PCOS reached the near normal maximal heart rate values very early in sub-maximal exercise. Exercise of maximum intensity in such individuals will show even more marked abnormal responses. Marked increase in heart rate at sub-maximal exercise indicates poor exercise tolerance which is a result of poor cardiovascular endurance. An increased heart rate shortens the diastolic period, thus coronary artery filling time is shortened. Therefore, perfusion would be disrupted, and myocardial oxygen demands are increased. This may predispose an individual to the development of potential cardiomyopathies.<sup>13</sup>

SBP shows more marked increase in PCOS women than in Non PCOS women. SBP rises during exercise because there is an increase in cardiac output (CO) which is greater than decrease in total peripheral vascular resistance (TPR) as evident by the formula: Mean BP = CO \* TPR. TPR is the quantification of after-load which is the resistance to ventricular emptying. Stimulation of sympathetic nervous system (SNS) increases myocardial contractility which results in enhanced stroke volume, which is further increased by depth of breathing, the muscle pump and change in venous compliance. Auto-regulatory mechanism in muscles causes peripheral vasodilation due to increased muscle metabolism with exercise. This allows reduction in TPR and

more blood to be delivered to skeleton muscles. Finally, SNS causes vasoconstriction in the viscera, thereby shunting blood away from the less essential organs to the working muscles.<sup>13</sup>

DBP was observed to be significant in the present investigation as  $p < 0.05$ . Just 3 tests had anomalous decreased DBP. Change of  $\pm 10$  mmHg is viewed as a typical DBP reaction. An anomalous reaction would be decline of more than 10 mmHg (in an untrained populace or more seasoned populace).

Pulse pressure comparison was significant with  $p < 0.02$ . In well-conditioned athletes and younger persons, the DBP may fall precipitously during exercise, sometimes to level approaching 0 mmHg creating an abnormally wide pulse pressure.

The mechanism behind the progressive rise in DBP is thought to be a response to the need for an increased driving pressure in the coronary arteries, which is necessary to overcome the demands of myocardium.

Whenever there is an increase in the pulse pressure the arteries are stretched maximally, cause fatigue and also fractures of the elements that are elastic, also there is a likely chance of accelerating the development and rupture of aneurysms, and also there is a more likely chance of advancing the development of intimate injury which can lead to thrombotic events and atherosclerosis.<sup>13</sup>

Limitation of the study was that though the test was a paced form of field test, fatigue was the limiting factor with some PCOS and Non PCOS women. Although the number of steps were same for all the subjects, but the beat of metronome cadence could not be followed by everyone.<sup>1</sup>

Other limitation was that as the step is the same size for all the subjects, therefore, characteristics of biomechanics such as height and lower limb length were maybe preferred.

## Conclusion

Thus, the study infers that the women with PCOS and Non PCOS have no distinction in  $VO_{2\max}$ . This examination likewise demonstrated that the PCOS diagnosis isn't related with aerobic exercise capacity. Since there was discovered no distinction in  $VO_{2\max}$  in PCOS and Non PCOS, it was expected that endurance exercise performance and the deduced effort required amid exercise do not have any difference between both the groups. Since it was a small sample size study therefore the only limitation is to increase the sample size.

## References

1. Dunaif, A. Insulin resistance and the polycystic ovary syndrome: mechanism and implications for pathogenesis. *Endocr Rev.* 1997 Dec;18(6):774–800.
2. Nidhi R, Padmalatha V, Nagarathna R, et al. Prevalence of polycystic ovarian syndrome in Indian adolescents. *J Pediatr Adolesc Gynecol.* 2011 Aug;24(4):223–7.
3. Norman, RJ, Dewailly, D, Legro, RS, Hickey, TE. Polycystic ovary syndrome. *Lancet.* 2007 Aug 25;370(9588):685–97.
4. Khademi A, Alleyassin A, Aghahosseini M, Tabatabaeefar L, Amini M. The Effect of Exercise in PCOS Women Who Exercise Regularly. *Asian J Sports Med.* 2010;1(1):35–40.
5. Pappalardo MA, Vita R, Di Bari F, Gly972Arg of IRS-1 and Lys121Gln of PC-1 polymorphisms act in opposite way in polycystic ovary syndrome. *J Endocrinol Invest.* 2017 Apr;40(4):367–376.
6. Aukkanen, JA, Kurl, S, Salonen, JT. Cardiorespiratory fitness and physical activity as risk predictors of future atherosclerotic cardiovascular diseases. *Curr Atheroscler Rep.* 2002 Nov;4(6):468–76.
7. Blair SN, Kohl HW, Paffenbarger RS, et al. Physical fitness and all-cause mortality. A prospective study of healthy men and women. *JAMA.* 1989 Nov 3;262(17):2395–401.
8. Wei, M, Gibbons, LW, Kampert, JB, Nichaman, MZ, Blair, SN. Low cardiorespiratory fitness and physical inactivity as predictors of mortality in men with type 2 diabetes. *Ann Intern Med* 2000;132:605–11.
9. Lakka TA, Venalainen JM, Rauramaa R, et al. Relation of leisure-time physical activity and cardiorespiratory fitness to the risk of acute myocardial infarction in men. *N Engl J Med.* 1994 Jun 2;330(22):1549–54.
10. Setji TL, Brown AJ. Polycystic ovary syndrome: update on diagnosis and treatment. *American Journal of Medicine* 2014;127(10):912–19.
11. Brown SP, Hash DE, Lyons B. Clinical exercise physiology: current perspectives on exercise prescription. *Phys Ther Rev.* 2001;6:189–214
12. David A. Robinson. Quantitative Analysis of the Control of Cardiac Output in the Isolated Left Ventricle. *Circulation Research.* 1965;17:207–221
13. Lembo M, Sicari R, Esposito R, et al. Association Between Elevated Pulse Pressure and High Resting Coronary Blood Flow Velocity in Patients With Angiographically Normal Epicardial Coronary Arteries. *J Am Heart Assoc.* 2017;6(7):e005710.

## Establishment of a Postmortem Centre Mortuary - III: Protocols and Guidelines for Dead Body Handling and Preservation

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### Abstract

Handling and preservation of dead bodies has to be done with utmost care to maintain the dignity of the person. Failure to stand upto these expectations is not only unacceptable on Humanitarian aspects but may raise a lot of concerns about the service in the mortuary facility of a hospital. The errors which can occur at the Mortuary are the exchange of dead bodies, mutilation by rodents and decomposition due to improper temperature maintenance. The authors in this article aim to describe the broad Standard Operatives Procedures regarding body preservation and handling in a Mortuary Setup for deaths occurring in Hospital, bodies brought by police and death occurring of outside the hospital. All these can be avoided if proper guidelines are laid and followed for dead body handling and preservation. Hospital policy makers and administrators need to lay down the proper guidelines and sincere attention for effective implementation of the guidelines for smooth functioning of the mortuary.

**Keywords:** Mortuary Management; Dead Body preservation; Medicolegal Cases; Forensic Medicine.

### Introduction

The Hospitals are not only meant for treatment but also have an obligation to look after the deceased in accordance with Community and Legal framework. The handling and preservation of dead bodies has to be done with utmost care to maintain the dignity of the person. Failure to stand upto these expectations is not only unacceptable on Humanitarian aspects but may raise a lot of concerns about the service in the mortuary facility of a hospital.<sup>1-3</sup> Guidelines and working protocols regarding body preservations in a Mortuary need to be robust and clear. Adherence to the Standards and Protocols are of utmost importance and is very much essential in smooth running of the Mortuary facility and service. The authors in their previous

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two articles in this series deliberated upon the basic infrastructure of Establishment of a Postmortem Centre Mortuary<sup>4</sup> and manpower and human resource management.<sup>5</sup> In continuation of the series of these articles regarding Mortuary Management, the authors in this article aim to describe the broad Standard Operatives Procedures regarding body preservation and handling in a Mortuary Setup.

### Dignified Management of the Dead

The dignity and respect of the dead should be maintained under all circumstances. The hospital is not absolved of responsibility until the dead person is duly handed over to the next of kin of the deceased. The doctors and staff should be sensitized for sympathetic dealing with the relatives and respectful handling of the dead body. If a person expires in the hospital, the body is not to be placed on the floor or otherwise kept carelessly. It should not be treated in a way that might hurt the sentiments of the next of kin. The dead body must be released directly from the ward/ICU/ (Non - MLC) if it requested by the legal heirs as unnecessary delay may cause decomposition and inconvenience to the relatives. Where mortuary facilities exist, the body should be wrapped properly in clean linen sheets and transported properly by deploying stretcher,

ambulance or trolley, to the mortuary premises where it should be placed under cold storage. It is the responsibility of the hospitals to have the dead bodies properly identified and to tag/label them appropriately to maintain their identity. There should be separate storage facility meant for the dead bodies, which should not be used for storage of bio medical waste or other items.

**Standard Operating Procedures/Guidelines for Handling and Storage of Dead Bodies in Hospital Deaths<sup>6-11</sup>**

**A. Aim:** To provide respectful, timely and professional handling, transport and storage of dead bodies.

**B. Objectives**

1. To take away dead bodies from the hospital wards as and when requested in a timely and professional manner.
2. Ensure safe transport and storage of dead bodies in mortuary till they are handed over to the appropriate custodians.
3. Handling over the body to the appropriate custodian under receipt.
4. Maintain proper record of incoming and outgoing dead bodies.
5. Maintain the dignity of the dead throughout.
6. Proper Identification of the body at every level.

**C. Function**

1. Pick up of dead bodies from hospital wards.
2. Storage of dead bodies until they are taken away for final disposal.
3. Safe preservation of the bodies to prevent any deterioration / decomposition.
4. Physical security against theft of bodies / body parts.
5. Handling over the bodies to the investigating officer (in case of MLC bodies)/authorized next to kin (in case non MLC bodies) after proper identification of the body and the recipient.
6. Maintenance of record of all bodies received and handed over.

**D. Transport of Dead Body to Mortuary**

1. After death, the body should be labelled with the help of waterproof lockable black bands/tags/labels tied to one of the extremities, preferably right wrist.
2. Identification data should be carefully recorded on these bands/tags/labels.
3. In addition in medico legal cases these bands should be stamped in red ink with the letters MLC.
4. Nursing staff on duty in the ward should ensure that surgical operation / drainage site if any is properly dressed before the body is wrapped.
5. Nursing staff on duty in the ward should ensure that dead body is wrapped in leak proof sheet/ plastic bag before it is handed over to next of kin or mortuary attendant.
6. When a mortuary attendant is informed that a pick up or removal is necessary, from the wards they should receive bodies in a courteous, sensitive and professional manner.
7. They should receive the duly wrapped and labelled body along with relevant record (death slip) and after confirming the identity of the deceased.
8. They should load the body on removal stretcher/ambulance and transport it carefully to the mortuary.
9. They should always operate with their safety and security in mind and should wear Personal Protective Equipment.

**E. Intake Procedure and Maintenance of Mortuary Register**

1. Identify the body by the ID label/band.
2. Death Slip particulars should be matched with ID.
3. Record the body received in the Body Register of Mortuary.
4. Following column should be there in Body register (a long, thick and durable register):
  - a) Serial number
  - b) Name
  - c) Age
  - d) Sex
  - e) Address

- f) Hospital registration number
- g) MLC/ Non MLC
- h) Date and time of Death
- i) Date and time of receiving the body in Mortuary
- j) Body brought from
- k) Signature of On -Duty Mortuary staff receiving the body
- l) Date and time of handing over the body to next of kin/Investigating officer
- m) Particulars of person receiving the body like name, signature, contact number, address and relation with the deceased.
- n) Signature of On - Duty Mortuary staff handing over the body

5. Arrange for storing the body in cold storage.

**F. Body storage**

1. Store in proper refrigerated storage cabinets/shelves or cold chambers at a temperature of 3.5 to 6.5 degree Celsius.
2. Infected /decomposed dead bodies should be stored in separate freezers, if possible.
3. Ensure that there is no access for rodents/pests into the body storage area.
4. Keep storage area clean and free from any such matter which may attract rodents /pests.
5. There should be power back up round the clock.
6. The cold storage room /cabinet should be kept under key and lock. The opening of cold storage and releasing of body should only be permitted by authorized person.
7. The capacity of the body storage should be twice the daily average intake of bodies in the Mortuary.
8. The Cold Chambers should have a double compressor which can be switched on alternatively for fail safe mechanism.

**G. Releasing a Body**

1. Confirming the particulars of the body to be released.
2. Verify the identity of the recipient/kin.
3. Locate and retrieve body from refrigerated storage.
4. Assist in transferring the body to hearse van with due care and dignity.
5. Sign body out of body register.
6. Note down recipient's particulars with signatures.
7. In MLC cases body is to be received by Police officials.
8. Hospital should provide coffin cloth to wrap the body free of cost.

**Standard Operating Procedures / Guidelines in Medicolegal Cases Brought by Police**

Mortuaries usually handle Medico-legal case (MLC) deaths occurring in the attached Hospital or in the Jurisdiction of the police stations attached to the Mortuary. Non MLC cases are generally kept for a short duration till the relatives make the arrangement for last rites. In MLC cases, the custodian of dead bodies in all cases of deaths where further legal investigations are required is the jurisdictional police. The Hospital / Mortuary is just a facilitator for preserving the dead bodies. The custody and responsibility of body directly lies with the Police without any third party intervention.

1. The request for preservation has to be permitted by authorized doctors.
2. The police personnel depositing the dead body in mortuary cold chamber for preservation must ensure that tag/label indicating the name of police post with FIR/DD number has been put on the dead body for purposes of identification.
3. No dead body should be received and stored in the cold storage by the staff without any identity tags/labels.
4. The permission for preservation of the dead body has to be taken from the officer in-charge on duty by filling a request form.
5. In case of unknown dead bodies, the police work for the first 72 hrs after death trying to identify the dead person. After this 72 hours police should conduct the postmortem examination as soon as possible so as to avoid decomposition changes which may hinder the determination of cause and manner of death.

The usual lacuna in the system at this part of

management is the delay in Police approaching the hospital/mortuary for postmortem examination. A much longer delay results in poor outcome of autopsy in terms of cause of death and sometimes manner of death.

### Preservation of Non MLC Bodies from Outside Hospital

Many times Medical Superintendent / Mortuary Incharge / Chief Medical Officer may receive a request for preserving the bodies for natural deaths occurring outside of their Hospital. Generally such requests are due to the waiting for arrival of the relatives/next of kin from far off places for the last rites. Routinely, the practice of preserving non medicolegal cases is usually avoided due to space constrain at the cold storage facilities and possibility of attenders not turning up after preserving the dead body which will give rise to new problems of whom the custody of the dead body is to be given. But keeping a humanitarian aspect, the dead body can be preserved in Mortuary provided the Authorized officer has perused all the documents like Death certificate etc and assessed the genuineness of the request. Rest of the procedure will be same as mentioned above.

### Conclusion

The errors which can occur at the Mortuary are the exchange of dead bodies, mutilation by rodents and decomposition due to improper temperature maintenance. All these can be avoided if proper guidelines are laid and followed for dead body handling and preservation. Hospital policy makers and administrators need to pay sincere attention for effective implementation of the guidelines for smooth functioning of the mortuary.

### References

1. Express New Service. Conspiracy alleged in body swap in Ahmedabad Hospital. The Indian Express. 2019 May 12. [Internet]. [Cited 2019 Nov 05]. Available from; <https://indianexpress.com/article/cities/ahmedabad/ahmedabad-conspiracy-alleged-in-body-swap-by-vs-hospital-case-filed-5723343/>.
2. Express New Service. Rats Devour Dead Body in Orissa Hospital. The New Indian Express. 2019 May 13. [Internet]. [Cited 2019 Nov 05]. Available from; <http://www.newindianexpress.com/states/odisha/2019/may/13/rats-devour-dead-body-in-odisha-hospital-1976341.html>.
3. Das S. Express New Service. Decomposed body at Hospital Kick up a row. The Indian Express. 2019 July 12. [Internet]. [Cited 2019 Nov 05]. Available from; <http://www.newindianexpress.com/cities/thiruvananthapuram/2019/jul/12/decomposed-body-at-hospital-mortuary-kicks-up-a-row-2002708.html>.
4. Yadav A, Abilash S, Debbarma A, Gupta SK. Establishment of A Postmortem Centre Mortuary-I: Basic Infrastructure. Indian Journal of Hospital Administration 2018;2(2):67-72.
5. Yadav A, Kulbhushan, Debbarma A, Gupta SK. Establishment of a Postmortem Centre Mortuary - II: Manpower and Human Resource Management. RFP Indian Journal of Hospital Administration 2019;3(1):15-19.
6. Management of Mortuaries. Directorate General of Health services. Ministry of Health and Family Welfare. Government of India. 2014 March 27.
7. Gupta SK, Yadav A. Mortuary Manual. Department of Forensic Medicine, AIIMS, New Delhi; 2018.
8. Facilities for Mortuary and Post-Mortem Room Services; Design and briefing guidance. Scottish Health Planning Note 20. National Health Service Scotland. Property and environment forum. January 2002.
9. Precautions for Handling and Disposal of Dead Bodies. Department of Health. Hospital Authority. Food and Environmental Hygiene Department. 10<sup>th</sup> edition, 2014. [Internet]. [Cited 2019 Nov 05]. Available from; [https://www.chp.gov.hk/files/pdf/grp-guideline-hp-ic-precautions\\_for\\_handling\\_and\\_disposal\\_of\\_dead\\_bodies\\_en.pdf](https://www.chp.gov.hk/files/pdf/grp-guideline-hp-ic-precautions_for_handling_and_disposal_of_dead_bodies_en.pdf).
10. Mortuary Unit Standard Operating Procedures. OCME policy. District of Columbia Office of the Chief Medical Examiner. [Internet]. [Cited 2019 Nov 05]. Available from; <https://ocme.dc.gov/sites/default/files/dc/sites/ocme/publication/attachments/Mortuary%20Operations%20Manual%2010.pdf>.
11. Managing infection risks when handling the deceased. Guidance for the mortuary, post-mortem room and funeral premises, and during exhumation. The Stationery Office, William Lea Tag. 2018: Norwich. [Internet]. [Cited 2019 Nov 05]. Available from; <http://www.hse.gov.uk/pUbns/priced/hsg283.pdf>.

## Palliative Care: Model and Types

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**Abstract:**

Palliative care is a multiple team approach to provide care for patient. Palliative care not only to care for patient in a holistic approach, it cares patient's family also. The expert team select a particular model or approach to provide care to patient.

**Keywords:** Palliative care; Models of palliative care, Multiple care approach.

### Introduction

Palliative care is a specialized holistic care provided to patient whose treatment option under palliative. Here patient will be taken care with symptomatic management. This palliative care approach provides care to patient and family members. Palliative care provided by a specially trained multi approach team. This multi approach team consists of doctors, nurses, pharmacists, social workers, volunteers and chaplin. When a patient diagnosed to provide a palliative care, members of team decide to care a patient with appropriate palliative care models. This review explains about palliative care models.

**Curative Medicine:** Curative medicine is mainly clinical medicine that focuses only on goal of cure of diseases. It only take care of medical goal only, but other goals are very much important as well like promotion of health, prevention of illness, relieving suffering, and restoring functional capacity. One of most important component is caring for those who cannot be cured<sup>1</sup>, all these component can be answered by Palliative medicine. In curative model, treatment is considered as a logical subject that is best decided by your physician.

**Palliative Medicine:** According to World Health Organization (WHO) defines Palliative care (PC) "The active total care of patients whose disease is not responsive to curative treatment."<sup>2</sup> In PC, plan of management is specifically according to each patient, their preferences for treatment and

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personal values are also considered in that. This approach contrasts with the

So In curative model, there is chance of neglect of few components, these goals can be achieved with help of Palliative medicine. As a administrator we must think this broader aspect of health i.e. Palliative Care.

### Models of Palliative Care

#### *Home Based Palliative Care/Community Based Palliative Care*

In Community based Palliative Care, Doctors, nurses and social workers are trained to improve clinical skill, communication skills and equipped to provide patient's care at home.<sup>3</sup>

WHO also started a public health strategy to integrate PC into our existing health care system. By this mean, we can best reach to everyone in target population.

#### *Hospital Palliative Care*

In Hospital palliative Care, Whole health teams provide consultative/ outpatient services. Primary care physician (who is in charge of the patient and who at times refers the patients) will provide palliative care as per need of patient.

In consultation model, PC team does not have

primary responsibility for patient and family, but they mainly provides specialist help to address their needs along with ongoing disease-specific treatment.<sup>4</sup>

In Out-Patient Model, Any PC service are provided in out-patient department for those patients who are able to come to hospital.

In -Patient Model, there is an palliative department of hospital, who can have particular beds in different wards for palliative patients i.e. terminally/ chronically ill patients. Their all supported care will be provided to admitted patients.

### ***Hospice and Hospice Care***

Hospice care means access to care that ensure the best Quality of Life and death. It is defined as "Palliative or comfort care without concentrating on aggressive disease reduction." Apart from it, PC mainly focused on best Quality of Life only. There are only 9 Hospice unit which are established, fully functioning in India. The first hospice unit is, "Shanti AvednaSadan, Mumbai" with 100 beds facility.

### ***Types of Palliative Care***

#### ***Palliative Care includes***

1. *Primary Palliative Care:* It include not only professional delivery of medical care but also helping individual and its families to resume responsibility for himself/herself and their community as well. Primary Palliative care team includes Primary PC Provider i.e. a medical, nursing or allied health professional, helping the patients. It includes educating the community prevention of life-limiting health problems, early detection, control and appropriate management.
2. *Specialist Palliative Care:* It includes interdisciplinary team who provide specialist PC, whose main provide palliative care to patients who is suffering from fatal

condition. Specialist PC services can be provided in community, home, hospitals and PC units. Specialist Palliative Care Provider can be medical, nursing or allied health professional whose training are trained for palliative care. They should have specialized knowledge, skills and expertise in the care of these patients.

### **Conclusion**

As in health system, curative medicine is old and traditional system used for cure of patients. In curative medicine we only care of patients medically, But as era changes, we need to change our health system medicine also from curative to palliative medicine which include all other aspects of health.

All models used in Palliative medicine should provide comprehensive care to patients. By using these models, the individual needs should be addressed that include preventive, physical, social, psychological and spiritual components. All members of palliative team can provide palliative care to patients. Community participation should be encouraged to make palliative medicine concept successful. When a patients is in end stage of life, identify their different source of stressors and make sure to solve it before patients ceased.

### **References**

1. Callahan D, Parens E. The ends of medicians: shaping new goals. Bull N Y Acad Med. 1995 Summer;72(1):95-117.
2. World Health Organization. Cancer Pain Relief and Palliative Care: Report of a WHO Expert Committee. Geneva, Switzerland: world Health Organization; 1990.
3. Adapted from Palliative Care Australia. A Guide to Palliative Care Service Develop [ment: A population based approach. Internet. Accessed on July 7, 2016.

## Effectiveness of the Video Assisted Teaching on Knowledge Regarding Prevention of Malnutrition Among the Mothers of Pre-Schooler

Suhasini Vinayak Sanas

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### Abstract

The present study assess the effectiveness of the video assisted teaching on knowledge regarding Prevention of malnutrition among the mothers of pre-schooler.

**Objectives:** To assess the effect of video assisted teaching on knowledge of prevention of malnutrition among the mothers of preschooler children.

**Methodology:** Research Design-quasi experimental (one group pre-test and post-test design), sampling technique-Convenient sampling, Research Setting-Slum area of city.

**Results:** Findings of the study found that mothers of pre-schooler children have adequate knowledge about prevention of the malnutrition among the pre-schooler children. In pre-test after receiving the video teaching on prevention of malnutrition the mother had higher knowledge scored in the post test, then pre-test. the 'paired t' use to find the effect of structured teaching program on prevention of malnutrition the mothers of pre-schooler children in selected slum areas revealed that the video assisted teaching is effective in increasing the knowledge of the mothers.

**Keywords:** Malnutrition; pre schooler; Slum area; Physical assessment; Nutritional assessment; Health status etc.

### Introduction

The present study assess the effectiveness of the video assisted teaching on knowledge regarding Prevention of malnutrition among the mothers of pre-schooler.

### Objectives

1. To assess the knowledge of mothers of preschooler children regarding prevention

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of malnutrition before the video assisted teaching program.

2. To assess the effect of video assisted teaching on knowledge of prevention of malnutrition among the mothers of preschooler children.
3. To compare the knowledge score before and after video assisted teaching program regarding prevention of malnutrition among the mothers of pre-schooler children.
4. To associate the study findings with the selected demographic variables.

### Hypothesis

$H_0$ : There is no significant difference in knowledge score regarding prevention of malnutrition among the mothers of pre-schooler children after the Video assisted teaching.

$H_1$ : There is significant difference in the knowledge score regarding prevention of malnutrition among the mothers of pre-schooler children after video assisted teaching.

### Review of Literature

1. Review of literature related to regarding malnutrition.<sup>1</sup>
2. Review of literature related to knowledge of mothers regarding malnutrition.<sup>2</sup>

3. Review of literature related to effect of video assisted teaching programme.

### **Coceptual Frame Work**

The general system theory was developed by Ludwig Von Bertalanffy during the late 1930.

### **Input**

It has been defined as any form information and material that enters into the system through the boundary.

In this study group is Mother of pre-schooler children and input refers to the Mothers will assessed for knowledge regarding prevention of malnutrition before providing the video assisted teaching.

### **Throughout**

According to theory it is a process that some point between the input and output process and enable the input to transferred in a such way that it can used readily by the system. Video assisted teaching will be provided to mothers of pre-schooler children to see the effect in increasing the knowledge regarding prevention of malnutrition.

### **Output**

It is any information or material that is transferred to the environment in the study output refers to changes in knowledge level regarding prevention of malnutrition it will be assessed after providing video assisted teaching.

### **Feedback**

Evaluation is done after intervention and decided to practice the effective method for routine practice.<sup>3</sup>

## **Materials and Methods**

- ❖ *Research approach:* evaluative research approach.
- ❖ *Research design:* single group pre-test and post-test (quasi experimental) design.
- ❖ *Research setting:* community area, Nahre Pune.
- ❖ *Research population:* The target population of the study was mothers of preschooler.

- ❖ *Sample:* mothers of mothers of preschooler staying in community area, Nahre Pune were selected.
- ❖ *Sample size:* Thirty (30) mothers of preschooler.
- ❖ *Sampling technique:* Non probability: purposive sampling technique.

### **Tool Preparation**

A tool is an instrument or equipment used for collection of data.

### **Development of the Tool**

#### *Questionnaire*

A structured questionnaire was prepared to determine the knowledge of mothers of pre-schooler children regarding Prevention of Malnutrition.<sup>1</sup>

The questionnaire consists of all closed ended questions as they are easier to administer and analyse. They can also be completed in a given amount of time.

#### *Section A: Consent form*

#### *Section B: Semi-structured questionnaire on the demographic data*

It consist of the items on demographic information about the selected background factors such as age of the mother, education qualification of mother, age of child in years, no of child in family husbands occupation and wife occupation.,

### **Pilot Study**

The pilot study conducted by using 6 samples. The pilot study was conducted form to find reliability of tool and effectiveness of structured teaching programme. the purpose of study explained to sample, confidentiality was maintained.

### **Plan for Data Collection**

Data will be collected by the investigator herself using multiple choice questionnaire.

### **Plan for Data Analysis**

The data will be analysed by using descriptive and inferential statistic such as frequency mean, percentage, standard deviation, paired 't' test, chi squire ( $\chi^2$ ) test between knowledge score with selected demographic variables.<sup>4,6</sup>

## Results and Discussion

Main findings of the study are discussed under the following headings

### Section I:

Percentage of distribution of the socio-demographic variables of the mothers of preschooler children.

### Major Findings

- With respect to age in years, majority of Mothers age group of 18-24 years is (32) 53%, 24-30 years is (18) 30% and 30-above were (10) 16.6%.
- Regarding the educational Qualification, majority of Mothers (6) i.e. 10% are formal educated (10) i.e. 16.6% done primary, (22) i.e. 36.6% done secondary, 15 i.e. 25% done graduate, (7) i.e. 11.6% done post graduate.
- In relation to the Number of children, the majority of subjects has 1 child (26) i.e. 43.3%, 2 child (28) i.e. 46.6% and 3 children (6) i.e. 10%.
- In relation to the age of child, majority of

subjects (22) i.e 36.6% belongs to the age group 02-03 years, (18) i.e. 30% belongs to the age group 03-04 years, (20) i.e. 33.3% belongs to the age group of 04-05 years.

- In relation to the husbands occupation, majority subjects shows, (33) i.e. 55% are private workers, (4) i.e. 6.6% are government, (23) i.e. 38.3% are self-employed.
- In relation to the demographic variable, majority subjects shows, (36) i.e. 60% are Housewife (14) i.e. 23.3% are self-employed, (10) i.e. 10% are working (14).

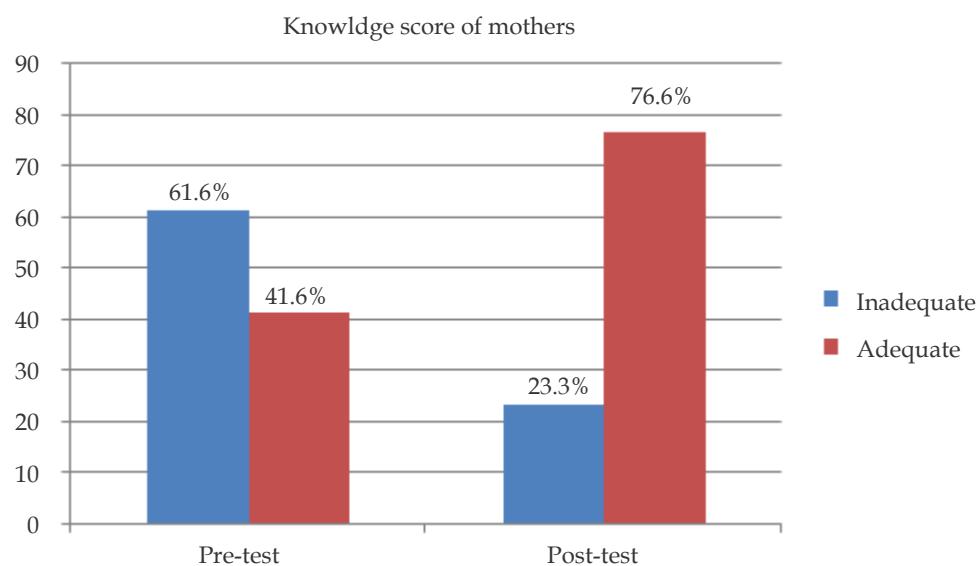
### Section II:

Assess the knowledge of Mothers regarding prevention of malnutrition among the preschooler children residing in the selected slum areas of the city before the video assisted teaching.(6)

- In the pretest shows knowledge variables and percentage distribution, knowledge variables are divided into two. Inadequate (0-12) = (37) 61.6% and Adequate (13-24)= (25) 41.6%.

**Table 1:** Frequency and percentage distribution of knowledge scores of subjects regarding effectiveness of video assisted teaching on malnutrition.

Knowledge score	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Inadequate (0-12)	37	61.6%	14	23.3%
Adequate (7-16)	25	41.6%	46	76.6%



**Fig. 1:** Knowledge Score of Mothers

**Section III:**

Assess the post test knowledge regarding prevention of malnutrition among the mothers of preschooler children residing in the selected slum areas of the city after the video assisted teaching.

- The Post test shows knowledge variables and percentage distribution, knowledge variables are divided into two. Inadequate (0-12) = (14) 23.3% and Adequate (13-24) = (46) 76.6%.

**Section IV:**

Association between knowledge and selected demographic variables regarding the knowledge of the mothers on prevention of the malnutrition among the preschooler children residing in selected slum areas of the city.

The above table shows the that tabulated 't' value is less than the calculated value at the 59 degrees of freedom at 0.005 level of significance between pretest and pos t test knowledge score of Mothers of preschooler children residing in selected slum areas.

**Conclusion**

Findings of the study found that mothers of preschooler children have adequate knowledge about prevention of the malnutrition among the preschooler children. In pre-test after receiving the video teaching on prevention of malnutrition the mother had higher knowledge scored in the post test, then pre-test. the 'paired t' use to find the effect of structured teaching program on prevention of malnutrition the mothers of pre-schooler children in selected slum areas revealed that the video assisted teaching is effective in increasing the knowledge of the mothers

**Recommendations**

On the basis of findings of study following recommendations have been for study

- The study can be replicated with larger sample to generalise the findings.
- A study to be conducted in different settings area.
- A study to be conducted to find out the level of knowledge on educational intervention in experimental and control group.
- A comparative study a can be made in urban and rural population.
- A study can be done to assess the attitude of prevention of malnutrition.
- A study can be done to assess the health and well - being of the children and mothers.

**References**

1. Parthasarathy A. IAP Textbook of Pediatrics, Jaypee Brothers Medical Publishers Pvt. Ltd, New Delhi, 3<sup>rd</sup> edition 2003.pp.59-63.
2. Basavantahappa BT. Community health Nursing, Jaypee Brothers Medical Publishers Pvt. Ltd, New Delhi, First Edition 2006.pp.401-9
3. Basavantahappa BT. Nursing Research, J. P. Brother Medical Publishers Pvt Ltd, New Delhi, First Edition. 1998,
4. Denise F. Polit and Cheryl Tatano Beck, Nursing Research, Published by Wolter Kluwer India Pvt. Ltd. New Delhi, 8<sup>th</sup> edition 2008.pp.01-789.
5. Dorothy R. Marlow, Barbara A. Redding. Text book of paediatric nursing. Published by Elsevier, a division of Reed Elsevier india pvt. limited, 6<sup>th</sup> edition 2009.pp.386-401.
6. Prabhakara GN. Biostatistics, Jaypee Brothers Medical Publishers Pvt. Ltd, New Delhi, 1<sup>st</sup> edition 2006.pp.101,199,126.

## Factors Affecting Nurse Attrition in a Super Specialty Hospital: A Case Study

**Dishant Parakh****How to cite this article:**

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**Abstract**

Attrition rate in Human Resource department of hospitals has been a factor of great strain. Though questions regarding their recruitment and retention has widely been discussed the organizational factors affecting their attrition gives in fresh new perspective. The diagnostic solutions through changes made based on root cause analysis of employee's own concerns has been looked up. Forty nurses, which was approximately about one-fourth of the total members in the entire department have been cross-examined qualitatively and quantitatively to arrive at the results. The case study believes that Retention of high-quality nurses would automatically improve the morale of physicians, patients and their families.

**Keywords:** Nurseattrition; Hospitaladministration; Motivation; Organization development and diagnosis

**Introduction**

The XYZ Super Specialty Hospital offers world-class healthcare services to all. It consists of several Centers' of Excellence with a large team of internationally trained and highly experienced specialists. Supported by the best infrastructure, diagnostic, and treatment facilities, the hospital has a healthcare solution to meet every need. Since, the hospital unit is a private firm the attrition or the intent of attrition was more compared to government hospitals. Working abroad was the main destination for these nurses because of lucrative opportunities, recognition, higher salary (Sharma and Kamra 2009). It is located amidst a 100-acre lush green campus just 60 minutes' drive away from the center of the Metropolitan. Their state-of-the-art facility brings together many disciplines under one roof, but never loses sight of the traditional values of caring and compassion that are part of its vision. Various research suggests that organizational climate in which the care takes place plays a vital role in improving the patient outcomes (Pronovost et al. 1999) (Aiken et al. 1994).

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**Purpose**

The purpose of the study was to find out problems facing within the staffs, and uniquely to identify the factors which influence the nurses to leave their job. The research aims to find out what has been done by the administration to remedy these problems. The investigation is undertaken to make critical suggestions through analyzing the data, which will facilitate in solving the issues. In a cross-country report of five countries reveal that only one-third of the nurses in US are registered to provide quality health care to the patients (Aiken et al. 2001). The motivated nursing staff lends into the practical and effective management of the whole management. In the current economy of the healthcare industry, constant problems regarding the overall retention and recruitment of nurses further exaggerated by attrition of nurses threaten the quality of care and services to the patients visiting the hospital. Conducting this case study research reveals the inherent need to study the organizational diagnosis required to reduce nursing turnover in the medical industry, especially in a multi-departmental hospital with substantial human resources. The assessment determinates to enlighten stakeholders the importance of typically ignored services to the employees and key competencies required for future recruitments.

### **Assumptions**

The following assumptions made before following the methodology:

That there are inherent problems facing nurses in their operation leading towards resignation.

They will be honest in their opinion while taking the questionnaire and, at the same time, considering their option rated to be judicial.

That the workers are aware of my presence and are ready to co-operate for the good of both the parties.

They can understand my medium of language used (the style of instructions is replicated in both the local language and English).

### **Methodology**

A dual framework of qualitative and quantitative viewpoints is adopted as the primary survey tool for gathering the data, keeping in mind the heterogeneity of the employees on their literacy. The tools used during the feedback session survey were one-on-one interviews and filling up the questionnaire survey, which had both qualitative and quantitative aspects. Qualitative studies, in particular, had a lecture-noting format whereby the interviewers probed the questions, and the participants had to write down their responses. The survey and interviews are conducted among 40 nurses, which was approximately about one-fourth of the total members in the entire department (169 nurses). There was active prior-post observation and engagements with the nurses to bring in the external lens perspective while walking throughout the facility and noticing the operations of the nurses. The validity and rigor of the study were established through observation and focus group discussion (FGD). The FGD's was taken place with other stakeholders, including the nurses, to bring about the holistic viewpoint in the case study.

### **Qualitative Survey**

The key focus areas faced by majority of nurses are underlined in the survey. Given below is the interview guide and the response from the nurses.

*Interviewer:* What are the ways you personally adopt for stress relieving?

*Respondents:*

Spending time with family and friends, TV Shows and Books, Yoga and Exercise, Napping, Music, Travelling, Spending alone-time, religious activities.

*Interviewer:* Are there sufficient Employees Welfare Schemes [EMS] for my job. Answer in 'Yes' or a 'No'. If 'No', then why do you feel so?

*Respondents:*

- Yes - 35%
- No - Inadequate employees, irresponsibility, lack of health coverage i.e. perks like family health benefits not provided, based on the amount of workload its less, less sick leave.

*Interviewer:* I have established the relationships that I need to do my job properly. Answer in 'Yes' or a 'No'. If 'No', then why do you feel so?

*Respondents:*

- Yes - 87.5%
- No - Relatively newcomer/inexperienced in nursing thereby communication barriers, a bit introverted and anti-social in nature.

*Interviewer:* The salary that I receive is appropriate with the job that I perform. Answer in 'Yes' or a 'No'. If 'No', then why is it so?

*Respondents:*

- Yes - 15%
- No - No increment for the experienced worker with inflation and rising inflation in the market supporting family becomes tough, not appropriate in comparison to other hospital with more workload, resentment due to past subjects affecting their current salary, difference in wage between freshly hired workers and long term employed seniors, not sufficient for the loan taken for their degree.

*Interviewer:* The structure of my work shifts is well designed. Answer in 'Yes' or a 'No'. If 'No', then why is it so?

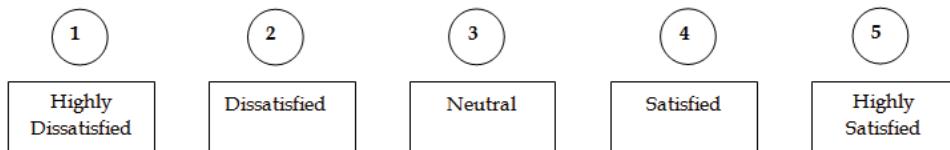
*Respondents:*

- Yes - 15%
- No - Staffing issue i.e. inadequate manpower and overloading nurse to patient ratio is very low while taking care of paper work at the same time, Running time gets hectic no proper handing over due to punctuality, Equipment's are not provided on time during work hour, altering shift which is detrimental due to pre-planned outing.

## Result and Discussion

### Quantitative Survey

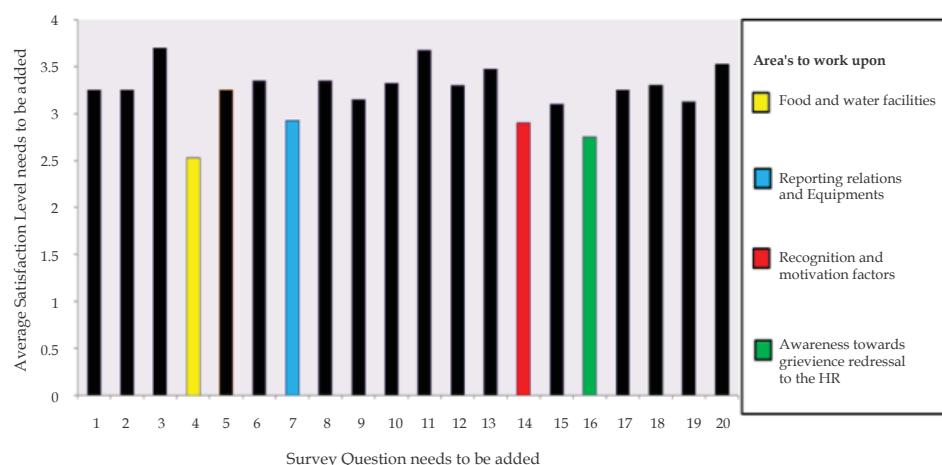
*Directions:* Do not put your name anywhere on this questionnaire. Please answer all twenty questions. Be open and honest. For each of the statements,



**Table 1:** Survey Result

Sl. No.	Questionnaire	Total	Average *
1	My job offers me the opportunity to grow as a person.	130	3.25
2	My relationship with my supervisor is a Harmonious one.	130	3.25
3	This organization provides regular training session to improve my knowledge and skill.	148	3.70
4	I am personally satisfied with the facilities (especially food and water) available in the organization.	101	2.52
5	The senior level of this organization treats me with respect and is friendly as well as professional.	130	3.25
6	I can always talk with someone at work if I have a work-related problem.	134	3.35
7	I have the information and resources that I need to do a good job.	117	2.92
8	I understand how to handle stressful environment.	134	3.35
9	The manner in which work tasks or assignments given is a logical one	126	3.15
10	I am very comfortable with my current level of work output.	133	3.32
11	My relationships with members of my work group are friendly as well as professional.	147	3.67
12	The priorities of my job are understood by me.	132	3.30
13	Other work units are helpful to my work unit whenever assistance is requested.	139	3.47
14	This organization has adequate mechanisms for recognizing and rewarding productive nurses.	116	2.90
15	The takeover between my shifts with my colleagues is generally smooth.	124	3.10
16	There is a general awareness for grievance redress (HR) in case of any problems.	110	2.75
17	My immediate supervisor is supportive of my efforts.	130	3.25
18	I understand my supervisor's efforts to influence me and the other members of the work unit.	132	3.30
19	There are no unresolved conflicts between the colleagues in this organization.	125	3.12
20	There is proper awareness of the hierarchy level on whom to report, to not escalate any issues	141	3.52

$$* \text{Average} = \frac{\text{Total score by cumulating all the scores}}{\text{Total number of nurses}} = \frac{\text{Total}}{40}$$



**Fig. 1:**

circle only one (1) number to indicate your thinking.

### Interviews

The principal objection of the nurses seem to be their remuneration - contested by the employees

in earlier events. It has exacerbated due to disproportionate slabs of income between freshers and seniors, causing broad resentment among the colleagues. They also feel that rising expenditure with inflation in the market does not sustain their family. They want the hospital to provide steady increments to the senior and experienced nurses.

Frequent barriers in the communication network encountered by the newly joined member lead to a deficiency of information and resource sharing. Additionally, they do not understand the chain of commands and reporting relationships for the day to day activities. In some departments, they face gender discrimination between male and female nurses, whereby male staffs are being relatively given comparatively low-risk patients and less paperwork during their working hours. This type of partiality and favoritism fosters resentment towards in-charges/ supervisors that maltreat certain individual employees.

During the duty hours, nurses felt they are proceeded to do work other than taking care of patients during staffing. Some of these complement tasks are taking care of patients belonging, checking for depreciating equipment and furniture, which are not the duties of a nurse adding on to the workload pressure.

### ***Personal Observations***

These were some of the fundamental points of observation while observing the nurses in their operation. They tie up with environmental challenges of workers participation and control by the authorities while career development issues seen in previous investigation which are not self-reported is observed (El-Jardali et al. 2010).

There is no need for an increase in staff members for more organized work when the distribution of workload and division of labor are planned efficiently. The chances of unexpected leaves and sudden emergency must be representative while implementation of operational charges and duties in the hospital.

Demand for changes in the organization differs from employee to employee based on their department and supervisors.

They seem bleak and tired after their night shifts. When enquired, nurses replied that they do not get any food facilities other than tea and biscuits juts twice within the whole duration. In my opinion, the organization could provide some light snacks with glucose, to keep their calorie requirement up to the par.

The workers want acknowledgment for their hard work among the senior levels, which could be resolved through monthly award and recognition, for productive nurses. Furthermore, creating a pleasant rapport between their supervisors by conducting ice-breaking events.

### ***Diagnosis and Mitigation***

There are various factors which require long term outlook and board room discussions through cost-benefits analysis for reducing the turnover. The crucial elements for debate are Segregation of hierarchy level based on seniority and experience to establish a proper division of salary.

Revision of sick leave policy for nurses who are relatively far off from the hospital. They cannot travel from their homes to obtain an in-hospital medical check-up to get sick leave.

While the staffing issues will be dealt with by following the above rules. Nonetheless having a strict protocol in punctuality will lower the burden on previous shift nurses who are already exhausted from their duty time

In the short term, however, a few steps can be considered for potential implementation inside the organization, which includes:

Food arrangements, especially for the night duty staff with a modest amount of resting period (maximum up to 2 hrs), must be provided.

Providing a longer duration of orientation to newly recruited members. This adjustment can be combined as a training period to ensure a smooth transfer of fresh nurses and develop working relationships with their colleagues.

The organization must be open to any more useful suggestions from the employees themselves. It highlights that they are treating every member uniformly based only on their productivity, skill, and attitude.

### ***Conclusion***

The hospital group, since its inception, has successfully managed to provide quality medical care and inculcate a sense of societal obligation towards the community. The organization is relatively specific in defining its objective. Still, over the months, due to an increase in turnover rates of nursing staff, the hospital seems to need particular reforms to improve the motivation among these workers. There

seems to be insufficient research on how nurse staffing affects patient's outcome leading to not providing rationale for development of their standards and minimum requirements (Wunderlich et al. 1996).

The case study provides insights for further interventions through extensive feedback sessions in the hospital. They have a relatively varied set of challenges not restricted inside the infirmaries, and they must keep in mind the objective and vision of the founder. Transition programs to compare the competencies between the control and study group reveals significant differences when the programs are well structured and include these 6 core elements for the nurses: patient-centered care, communication and teamwork, quality improvement, evidence-based practice, informatics, safety, clinical reasoning, feedback, reflection, and specialty knowledge in an area of practice (Spector et al. 2015).

With a series of changes over time, I am sure that the organization will decrease its turnover with highly capable human resources working for providing world-class treatments to the patients.

## References

1. Aiken LH, Clarke SP, Sloane DM, et al. Nurses' reports on hospital care in five countries. *Health Aff (Millwood)*. 2001 May-Jun;20(3):43-53.
2. Aiken LH, Smith HL, Lake ET. Lower Medicare mortality among a set of hospitals known for good nursing care. *Med Care*. 1994 Aug;32(8):771-87.
3. El-Jardali, Fadi, et al. Nurses' Work Environment and Intent to Leave in Lebanese Hospitals: Implications for Policy and Practice. *Int J Nurs Stud.* 2011 Feb;48(2):204-14.
4. Pronovost PJ, Jenckes MW, Dorman T, et al. Organizational characteristics of intensive care units related to outcomes of abdominal aortic surgery. *JAMA*. 1999 Apr 14;281(14):1310-7.
5. Sharma SK, and Kamra PK. Attrition among nurses in selected public and private hospitals at Ludhiana, Punjab. *Nursing and Midwifery Research Journal* 2009;5(4):176-79.
6. Spector, Nancy, et al. Transition to Practice Study in Hospital Settings. *Journal of Nursing Regulation*, Elsevier, 22 July 2015, [www.sciencedirect.com/science/article/abs/pii/S2155825615300314](http://www.sciencedirect.com/science/article/abs/pii/S2155825615300314).
7. Wunderlich GS, Sloan FA, Davis CK. *Nursing Staff in Hospitals and Nursing Homes: Is It Adequate?* Washington, DC: Institute of Medicine, National Academy Press, 1996.

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The second page should carry the full title of the manuscript and an abstract (of no more than 150 words for case reports, brief reports and 250 words for original articles). The abstract should be structured and state the Context (Background), Aims, Settings and Design, Methods and Materials, Statistical analysis used, Results and Conclusions. Below the abstract should provide 3 to 10 keywords.

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State the background of the study and purpose of the study and summarize the rationale for the study or observation.

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The methods section should include only information that was available at the time the plan or protocol for the study was written such as study approach, design, type of sample, sample size, sampling technique, setting of the study, description of data collection tools and methods; all information obtained during the conduct of the study belongs in the Results section.

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Present your results in logical sequence in the text, tables, and illustrations, giving the main or most important findings first. Do not repeat in the text all the data in the tables or illustrations; emphasize or summarize only important observations. Extra or supplementary materials and technical details can be placed in an appendix where it will be accessible but will not interrupt the flow of the text; alternatively, it can be published only in the electronic version of the journal.

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Include summary of key findings (primary outcome measures, secondary outcome measures, results as they relate to a prior hypothesis); Strengths and limitations of the study (study question, study design, data collection, analysis and interpretation); Interpretation and implications in the context of the totality of evidence (is there a systematic review to refer to, if not, could one be reasonably done here and now?, What this study adds to the available evidence, effects on patient care and health policy, possible mechanisms)? Controversies raised by this study; and Future research directions (for this particular research collaboration, underlying mechanisms, clinical

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### Standard journal article

[1] Flink H, Tegelberg Å, Thörn M, Lagerlöf F. Effect of oral iron supplementation on unstimulated salivary flow rate: A randomized, double-blind, placebo-controlled trial. *J Oral Pathol Med* 2006; 35: 540-7.

[2] Twetman S, Axelsson S, Dahlgren H, Holm AK, Kälestål C, Lagerlöf F, et al. Caries-preventive effect of fluoride toothpaste: A systematic review. *Acta Odontol Scand* 2003; 61: 347-55.

### Article in supplement or special issue

[3] Fleischer W, Reimer K. Povidone iodine antiseptis. State of the art. *Dermatology* 1997; 195 Suppl 2: 3-9.

### Corporate (collective) author

[4] American Academy of Periodontology. Sonic and ultrasonic scalers in periodontics. *J Periodontol* 2000; 71: 1792-801.

### Unpublished article

[5] Garoushi S, Lassila LV, Tezvergil A, Vallittu PK. Static and fatigue compression test for particulate filler composite resin with fiber-reinforced composite substructure. *Dent Mater* 2006.

### Personal author(s)

[6] Hosmer D, Lemeshow S. *Applied logistic regression*, 2nd edn. New York: Wiley-Interscience; 2000.

### Chapter in book

[7] Nauntofte B, Tenovuo J, Lagerlöf F. Secretion and composition of saliva. In: Fejerskov O,

Kidd EAM, editors. *Dental caries: The disease and its clinical management*. Oxford: Blackwell Munksgaard; 2003. p. 7-27.

### No author given

[8] World Health Organization. *Oral health surveys - basic methods*, 4th edn. Geneva: World Health Organization; 1997.

### Reference from electronic media

[9] National Statistics Online—Trends in suicide by method in England and Wales, 1979-2001. [www.statistics.gov.uk/downloads/theme\\_health/HSQ20.pdf](http://www.statistics.gov.uk/downloads/theme_health/HSQ20.pdf) (accessed Jan 24, 2005): 7-18. Only verified references against the original documents should be cited. Authors are responsible for the accuracy and completeness of their references and for correct text citation. The number of reference should be kept limited to 20 in case of major communications and 10 for short communications.

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