# Role of psychological intervention on psychological well being in incidental radiological findings of otherwise normal pregnant females

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# Abstract

Pregnancy is a state of emotional turmoil. With the advent of newer diagnostic techniques and with the popularity of antenatal maternal care more and more females are nowadays diagnosed with a range of incidental findings like gall bladder/urinary stones, liver enlargements etc, which are mostly non significant and not harmful. But these incidental findings if not explained in proper manner to pregnant females can lead to be a severe stress factor for them. So psychological interventions are needed to alleviate apprehension and worry related to such findings. This randomised case control study has been done to evaluate the effect of psychological interventions among the pregnant females who were diagnosed radiologically having incidental findings of gall bladder stone, liver enlargement etc.

**Keywords**: Incidental findings, Ultrasonography, Pregnancy, Well being.

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# INTRODUCTION

Pregnancy is a highly charged and emotive phase of life due to number of ongoing biological and psychological changes taking place in the gravid. The state in itself is stressful and if added with some additional doubts regarding health can take shape of severe morbid conditions. Nowadays routine ultrasonographic examination during pregnancy for foetal well being is widely practiced. Many a times these routine radiological investigations reveal some incidental findings related to maternal or foetal health. There is little or no literature concerning the findings in subjects, but Mills et al showed that 9.1% of all patients who underwent abdominal ultrasonography also had an incidental finding. The results of 1000 examinations were analysed. In 25% of patients<sup>1</sup>, a significant abnormality was found and almost one-third of these were incidental findings. The incidence of abnormalities was not significantly different between patients referred via their general practitioners and those referred via the hospital outpatients department. Other literature reveals numerous incidental findings in patients, including intrauterine pregnancies, gallstones, various cysts, carcinomas, and arteriovenous variations/ malformations, to name a few. Most of the times these radiological USG findings are non significant and harmless, but due to their presentation they add up the apprehension of mother and family members. Now the opinion on matter of disclosure of information of

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incidental findings is diverse. They include: Whether the doctor should tell the patient? Does the patient himself/herself want to know about it? Was the patient priori aware of the possibility of that incidental finding? Whether the possibility of a false-positive results taken into account? Radiologist (brain MRI researchers) felt that it was their ethical duty to inform the subject of an incidental finding. But some suggested that only the most certain of findings should be divulged because of the potential harm of a false-positive result. The same study shows that 97% of subjects surveyed said they did want to know of any incidental findings.<sup>2</sup> As for the follow-up procedure, most again felt it was their responsibility to inform the model/research subjects and refer them to a doctor, with scans in hand, for further care. It should be noted that a significant minority felt that the follow-up should not be the entire responsibility of the subject.<sup>2s</sup>

# MATERIAL AND METHODS

Subjects were included in the study based on following criteria:

- Pregnancy not associated with complication
- Normal General Medical Condition
- Consent and willingness to participate in study
- Non related incidental finding in USG
- Incidental finding not harmful in the pregnancy course

Total one hundred subjects were enrolled in study by making two randomized groups of fifty subjects each. Group I (Control) subjects / families were told about their incidental ultrasonographic findings and their harmlessness in same visit but no comprehensive psychological measures taken to alleviate their apprehensions. Group II subjects were told about their ultrasonographic findings and specially counseled by psychiatrists in the form of individual and family counseling for all the prognostic outcomes in detail with their families. Both the groups were evaluated after one month on WHO Quality of Life Index and Patient satisfaction Index.

### **Tools used**

- Self structured counselling schedule and protocol: advice by psychiatrist regarding her normalcy, specialist reference, doubt clearance, follow up support, individual and family counselling
- WHOOOL: BREF Scale
- Patient Satisfaction Questionnaire from RAND Health (PSQ-III 51-item survey)

### RESULTS

Using online Graph Pad In Stat data were analysed for significance using unpaired *t* test.

Table 1: WHOQOL-BREF Scale

| Facet of testing                           | Control group<br>GP1 Mean(SD) | Test group GP2<br>Mean(SD) | Significance (p) |
|--|-------------------------------|----------------------------|------------------|
| Overall Quality of Life and General Health | 6(2)                          | 8(4)                       | 0.0021           |
| <b>Physical Capacity</b>                   | 14(4)                         | 17(3)                      | 0.0001           |
| Psychological Well-<br>Being               | 15(4)                         | 22(3)                      | 0.0001           |
| Social Relationships                       | 8(2)                          | 11(1.5)                    | 0.0001           |
| Environment                                | 25(5)                         | 26(4.5)                    | 0.295            |

Quality of life was significantly improved for all dimensions/facets of **WHOQOL-BREF Scale** except for environmental dimension.

**Table 2:** Patient Satisfaction Questionnaire from RAND Health

| (PSQ-III S1-Itelli survey)      |                                  |                               |                     |  |  |
|---------------------------------|----------------------------------|-------------------------------|---------------------|--|--|
| Facets of testing               | Control<br>group GP1<br>Mean(SD) | Test group<br>GP2<br>Mean(SD) | Significance<br>(p) |  |  |
| General Satisfaction            | 7(2)                             | 10(1.5)                       | 0.0001              |  |  |
| Technical Quality               | 10(2)                            | 16(3)                         | 0.0001              |  |  |
| Interpersonal Aspects           | 7(2)                             | 13(2.5)                       | 0.0001              |  |  |
| Communication                   | 4(2)                             | 11 (3)                        | 0.0001              |  |  |
| Financial Aspects               | 13(3)                            | 12(2)                         | 0.0527              |  |  |
| Time Spent with Doctor          | 3(2)                             | 5(3)                          | 0.0002              |  |  |
| Access/Availability/Convenience | 15(3.5)                          | 26(4)                         | 0.0001              |  |  |

The questionnaire included 51 items; item 30 refers to beliefs about a crisis in health care and is not used in scoring the satisfaction. Patient Satisfaction was significantly improved for all dimensions/facets of Patient Satisfaction Questionnaire from RAND Health except for financial aspects and time spent with doctor dimensions.

### DISCUSSION

It was noted that patients were improved in all dimensions of WHOQOL-BREF Scale as overall quality of life and general health, physical capacity, psychological wellbeing and social relationships except environmental dimension. Environmental dimension didn't improve probably due to lack of substantial changes at home and hospital setup to cater patients' additional need. This can be considered seriously and better engagement of family, society and hospital staff with patient care should be improved. In the Patient Satisfaction Questionnaire from RAND Health (PSQ-III 51-item survey), patients' satisfaction was improved in all dimensions except financial aspect. Financial aspect did not improved probably because of added burden of management of incidental finding in the patients. Time spent with doctor also improved because of large number of patients attending OPD daily in a medical college

hospital like ours and subjectively patient might not be fully satisfied with the time given to him, so such intervention give them satisfaction of being properly attended by doctors. So a special care should be provided to eliminate the aggravated turmoil, arising due to incidental findings in already stressed gravid mothers. Mechanism of response of this intervention is based on simple psychological principle of patient participation and information, giving him insight into his course of illness, prognosis and treatment that may be a cause of concern for her and her family members.

# **CONCLUSION**

On analysing the results it was found that when the special psychological management module was applied to

the patients and their attendants, they reported more satisfaction towards the treatment and their apprehensions were better alleviated. The programme needed only minimal additional institutional resources and the results in terms of patients' satisfaction and prognosis was better than control group.

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