

PRENATAL DIAGNOSIS: APPRAISAL OF AWARENESS AND UTILIZATION AMONG HEALTH WORKERS IN SOUTH WESTERN, NIGERIA

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ABSTRACT

Objective: To appraise the level of awareness about prenatal diagnosis among health workers in southwestern Nigeria and its utilization

Methodology: Questionnaires were administered to 270 health workers, randomly selected from private and public health institution in south western Nigeria.

Results: The distribution of health workers showed that 63.7% were in public and 36.7% were in private health institutions. Generally, majority (55.5%) were aware of prenatal diagnosis. Only 95(35.2%) respondent were aware of the existence of a prenatal diagnosis unit in Nigeria. The present level of awareness was considered inadequate by 195(72.2)% respondent. Major ways of improving the awareness and utilization were through it's incorporation into undergraduate training curriculum (31.5%) and academic programme (23.1%).Majority (78.2%) of health workers have never referred patients for prenatal diagnosis in Nigeria . Low level of awareness (48.0%) and high cost of service (28.0%) were the constraints most frequently identified.

Conclusion: The awareness of prenatal diagnosis among health workers in south western Nigeria is grossly inadequate. Similarly, it's utilization is poor. Ways of improving on this is suggested.

Key words: Prenatal diagnosis (PND), awareness, utilization.

INTRODUCTION

One of the monumental advances in the field of medicine is the introduction of prenatal diagnosis of fetal anomalies. There is however the risk that the speed of advance in this field may out strips the ability to introduce these innovations sensibly into clinical practice. The service is widely known and utilized in advanced countries as it is incorporated into health care services, especially antenatal care. The reverse is the case in most developing countries, where such service is a rarity and its awareness of it poor.

The role of health workers in the dissemination of appropriate information about prenatal diagnosis is very important. This role is best fulfilled when they have adequate knowledge and awareness about it, and upon which the right attitude of referral is developed. In our environment, PND service is not widely available, nor is its learning emphasized. Consequently, health workers may be equally unaware of neither it nor its availability.

This study aims at appraising the awareness of PND, its availability in Nigeria as well as its utilization by health workers in South Western, Nigeria about it. It also focuses on the reasons for the present low level of awareness and utilization and ways of improving on this.

METHODOLOGY

This is a questionnaire-based study of the awareness and perception of health workers in Southwestern, Nigeria on PND. A total of 270 health workers in both public and private institutions were randomly surveyed. The questionnaire sought for information on religion, location of practice, field of practice and years in practice. Their awareness of PND and its availability in Nigeria, source of information as well as previous utilization were also sought. Finally, questions were posed on the adequacy of the present level of awareness and possible ways of improving on this level.

RESULTS

General

The questionnaire was administered on 270 respondents, majority of whom had been in practice for between 6 and 10 years in either private (36.7%) or public (63.7%) health institutions. Physicians constitute the bulk of the respondents (57.4%), while others include pharmacists (10.0%), Nurses (17.4%), Laboratory Scientists (11.1%) and physiotherapists (4.1%). 200 (74.1%) out of the respondents were Christians and 70 (2.9%) were Muslim.

Awareness

The concept of prenatal diagnosis was well known to 150 (55.5%) respondents. Majority 175 (64.8%) does however not know the

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availability of a PND unit in Nigeria. Of the remaining 95 (35.2%) respondents that are aware of a PND unit in Nigeria. 58(61.1%) were Physicians, 15 (15.8 %) were Pharmacists, 10 (10.5 %) were Nurses, 12 (12.6 %) were Laboratory Scientists while none was a Physiotherapist.

The sources of information on PND and its availability in Nigeria were analyzed as follows: During undergraduate training 140(54.1%), from public media especially newspapers 36(13.9%), from discussions with others hospital workers 38(14.7%) and also during academic programmes such as scientific conferences and departmental meetings 45(17.4%). There were 259 responses. Public institution health workers obtained the information mainly during undergraduate training and academic programmes, while private institution health workers obtained the information mainly from public media and scientific conferences.

Adequacy of Awareness/Information on PND

To the question of whether the present level of awareness among health workers is adequate, only 15 (5.5%) answered in the affirmative. 195 (72.2%) viewed it as inadequate while 60 (22.2%) were undecided.

There were a total of 390 responses on ways of improving on the present level of awareness among health workers. 123 (31.5%) of the responses suggested its incorporation into undergraduate training curriculum, 53 (13.6%) suggested its incorporation into public seminars and discussions, 90 (23.1%) through academic programmes and 18 (4.6%) through public media such as print and electronic media.

Desirability

A total of 201 (74.4%) respondents believed it should be encouraged in Nigeria while 45 (16.7%) believed otherwise. 24 (8.9%) respondents were undecided. There were 54 responses to the question on why the programme is not desirable. 7 (12.9%) believed it will encourage abortion, 5 (9.3%) believed it is against religious doctrines and 43 (79.6%) held personal reasons apart from the two.

Utilization

Majority (78.2%) has never referred patient for PND in Nigeria. Instead, 144 (68.2%) respondents would do nothing, 62 (29.5%) would counsel patient to accept fate while 4 (1.9%) referred abroad.

Constraints

The constraints identified to be against the widespread utilization of PND in Nigeria include high cost of service (28.0%), low awareness (48.0%) religious bias (10.7%), socio cultural hindrances (9.3%) and absence of technology in developing countries (4.0%).

DISCUSSION

Health workers in South Western, Nigeria like elsewhere have the potential to enhance their awareness of prenatal diagnosis as well as to encourage its acceptance among the "at risk" population. It is believed that one reason why health workers may be hesitant about referring patients for PND is perhaps the fact that they themselves may not be adequately aware of the concept and its

availability in our environment. Our study confirms that although over half are aware of PND, the availability of the service in Nigeria is not known to the vast majority. The wide acceptance of PND worldwide was only recent. In Nigeria, even though it was conceived in 1987, it only became functional in 1993^{2,3,4}. The finding of majority of respondents having 6 to 10 years practice experience is in support of the fact that such topics only became incorporated into recent texts and literatures. Health practitioners are known for their restricted "Closed Circuit" life style. Hence, the source of information about PND was mainly during training. Our finding that majority of health workers would do nothing in majority of cases or even counsel patient to accept fate in a few cases was not surprising as we have been able to establish that there is dearth of information on PND. In addition to this however, high cost of the service was another major constraint identified. A previous study identified that several of the patients who made enquiries could not proceed with the service because of high cost³. The influence of religion could at best be regarded as speculative as a large percentage of the public and the respondents neither are still either unaware nor utilized the service. Our finding on ways of improving on the present low level of awareness is instructive. Information through public lectures, seminars and scientific meetings was the most favoured especially by public health workers. Information incorporated into undergraduate training programme is most favoured by health workers in both private and public institution.

On the whole PND is desirable in our environment. For those who are averse to it or whose mind is unmade up, religion was not a significant reason thus lending credence to the fact that religion may not be of primary importance when there is the possibility of having a congenitally malformed child. The fear of an increase in abortion rate, though mentioned was not very prominent. Perhaps health workers are now gradually adjusting to the fact that majority of abortions are done for other reasons mostly social⁵, than due to unfavourable PND outcome. Indeed, one important advantage of PND is the prevention of unnecessary abortion in any community with a high carrier rate^{1,6}. Personal consideration was a major reason for the non-desirability of PND by some workers. This may be a reflection of a local adage in Southwest that "he who wears the shoe knows where it pinches". It would appear that the awareness of PND by health workers in South Western Nigeria is parochial. It is also apparent that its low utilization is due in part to the poor awareness as well as the high cost of service. There is therefore the need to formulate both immediate and long-term awareness programmes to address this observation.

Information on PND should be incorporated and emphasized in undergraduate training as a long term measure to get future health workers aware. The immediate goal should be to emphasize PND in public lectures, academic discussions, symposia and conferences. This will be of benefit to health workers in both public and private institutions in the South Western, Nigeria. There may be an urgent need to examine the issue of subsidy from governmental and non-governmental agencies as well as bulk purchase of reagents in order to reduce the final cost of the service to the clients. These steps will also encourage health workers to refer patients for the service.

Table 1: Awareness of pnd in nigeria

A Awareness Respondents n = 270 (%)	
Yes	95 (35.2)
No	175 (64.8)

B Specialization Respondents N=95 (%)	
Physician	58 (61.1)
Pharmacist	15 (15.8)
Nursing	10 (10.5)
Laboratory Scientist	12 (12.6)

Table 2: Source of Awareness

Sources	Respondents N=259 (%)
Undergraduate Training	140 (54.1)
Public Media	36 (13.9)
Hospital Workers	38 (14.7)
Scientific Meetings	45 (17.4)

N.B: There were multiple responses

Table 3: Utilization / Referral

A: PREVIOUS REFERRAL

Response	Respondents N=270 (%)
Yes	59 (21.8)
No	211 (78.2)

B: OPTIONS

Options	Respondents N=121 (%)
Do Nothing	146 (69.2)
Accept Fate	61 (28.9)
Refer Abroad	4 (1.9)

Table 4: Constraints To Utilization

Constaints	Respondents N = 125 (%)
Cost	35 (28.0)
Awareness	60 (48.0)
Religion	13 (9.6)
Socio cultural	12 (9.2)
Others	5 (4.0)

Table 5: Improving Awareness / Utilization

Ways of Improving	Respondents N =390 (%)
Incorporate into Undergraduate training	123 (31.5)
Through Academic Programmes	90 (23.1)
Through Public Lectures	53 (13.6)
Through Mass Media	18 (4.6)

N.B: There were multiple responses

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